Established 1819.

WASHINGTON, D. C., AUGUST 15, 1893.

74th Year. New Series.-No. 40.



Morton, near Rhinebeck, N. Y., suffered a severe loss damage done amounting in the vicinity of \$200,000. The large barn, fitted with modern im-

provements, built at a cost of \$50.000, was entirely destroyed, the flames spreading to the poultry houses which sheltered 6,000 ehickens, devouring that place and killing all but a few fowls. At the time of the fire the barn contained about 100 head of the finest Guernsey cattle, nine horses, and 200 tons of hay, all of which were entirely consumed.

The origin of the fire was undoubtedly that of an incendiary, but whether the perpetrator will be caught or not is left with the future. By the hardest of warmed without expense to just the right work the engine house and the dairy and farmhouse were saved, though very badly scorched. There was no watchmen employed at the barn, which was ing. Milk from cowsthat have been givsecurely locked every night, so that the flames had secured a great headway before being discovered.

The barn was believed to be the most costly and complete ever built in the United States. The main building was 297 feet long by 65 feet in width and 50 feet in hight, with an L 89 x 52 feet. The structure included, besides and one-half pound each cottonseed and one end, ran four inch-and-a-half hotdepth, tool and engine rooms, grain bins, laboratory, bathing-room, and ample hallways, no less than 120 ordinary stalls and 46 box stalls on the main 1,500 tons. Last year, in March, our 168 feet long one way and 108 feet the the basement.

The bays above the stalls could accommodate 400 tons of hay, without covering over the middle hallway. The south door, looking up through the center of the building, was much larger than would be necessary to admit a freight train, and the cars and engine would have more than ample room inside, the passage being nearly 16 feet wide and 39 feet high in the clear. The barn, which was so arranged that it could be doubled in length, would accommodate 360 head of stock, or 400 with crowding, and also house all the hav, grain, and ensilage needed for this regiment of cows. The grain bin alone beld 20 carloads, while three silos held 500 tons each.

Fastened above to the walls in front and back of the rows of cows were teel tracks on which ran hanging cars. That back of the cows was for a manure car. The manure was thrown into this from the trench and rolled out to the rear, where it was dumped into a wagon or sled and hauled at once to the field. The saving under this system as comtracks in front of the cows carried cars from the siles and grain bins.

The cows had not been turned loose for exercise. All the cows did was to when hay is fed." eat, drink, sleep, and give rich milk.

Many people claim this is unnatural. for last season's work was recently com-

LLERSLIE, the home of artificial machine and requires artificial ex-Vice-President Levi P. care and treatment to produce the highest yield. With the so-called natural treatment she would utterly fail to by fire on Aug. 1, the make the profit that makes her so much ord of 8,295 pounds of milk in one year,

> Buckley watering device—every cow pounds in eight months; Lady Antoin-having a small bucket of water in her ette 2d, 830 pounds in one month; Bremanger. Whenever she took a drink a tonne, 5,701 pounds in seven months; fresh supply of water flowed in. There was scarcely a moment from 4 o'clock in months; Rosaline, 5,716 pounds in nine the morning until midnight that some months, and May blossom, 5,780 pounds animal was not drinking. The cattle never gorged themselves with water, but took a little and often and had the water just when they wanted it. The water was carried in pipes through the barn to each stall, and in this way was temperature.

It was determined here that cows give the best flavored butter soon after calving milk for a long time never yields the best flavored butter. Cows were bred so that calves were born every week in the year. The bulk of milk came then at all times from fresh cows and gave rich, delicate-flavored butter.

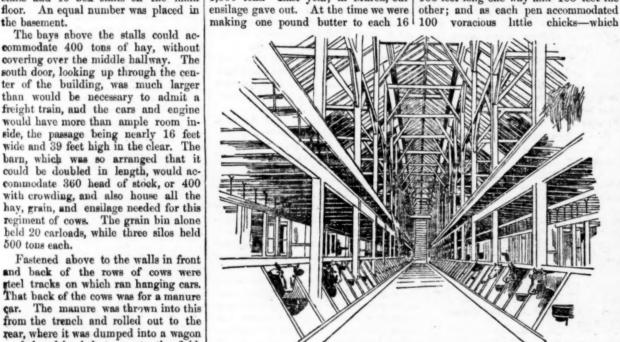
The ration for each cow per day was five pounds bran, four pounds cornmeal,

milk in a year, the highest being Passageris, 10,316 pounds. Eight cows produced over 8,000 pounds, 15 over 7,000 pounds, 33 over 6,000 pounds. The yearly average of butter is one pound from a little less than 17 pounds of the mixed milk of the whole herd. The cows were never forced, but were given what grain they were able profitably to turn into butter. A composite sample of the mixed milk of the whole herd for eight milkings, analyzed by Prof. Cooke, of the Vermont Experiment Station, showed 5.37 per cent. fat, 3.06 per cent. casein, and 15.18 per cent. total solids.

The individual record of the leading cows was as follows: Good morning, 3,-674 pounds; she is a nearly solid fawn, imported Nov. 16, 1887, and has a recmore valuable to her owner than the scrub.

The barn was furnished with the pounds in a month. Rosette, 8,101 pounds in 351 days; Olga, 775 pounds in one month; Margo, 6,097 in eight months.

The poultry department consisted of a group of buildings from which were sent to market each week about 500 artificially-incubated chickens; that is, between 20,000 and 25,000 a year. Ten incubators were kept in constant use, and all the desirable eggs that could be bought in the neighborhood were consigned to the developing care of these inventions. Half the eggs put in hatch out alive. Three-fourths of the chicks went safely through the brooders, and were sold as broilers at eight to 14 weeks from hatching, weighing when ready for market about one and a half pounds. The brooding arrangement was very simple. It consisted merely of a pen 5 x 15 feet, across which, near



INTERIOR OF THE BARN.

pared with the old plan of throwing the manure out through a hole in the wall and it then took nearly 20 pounds of the hight of the top board of the back of each cow is apparent. The milk to make a pound of butter, and the brooder varying from four and a half cows dropped off nearly 10 per cent. in yield of milk. We can raise enough ensilage on an acre to feed during the since Oct. 15 last. There was not a Winter three to five cows, and it takes sick animal in the herd; they never got two acres of the same land to produce a chance to hook each other; they lost enough hay for one cow. At the same no milk by being exposed to storms, time the milk and butter made from and no feed was wasted to supply force | cows fed ensilage is better flavored than

It is, and so is the giving of so much piled. It is an interesting exhibit. The rich milk. The modern dairy cow is an average yield was 6,1193 pounds of

inches for the babies up to a foot for the graduating class—the animation of the scene may be imagined.

Mr. Seely, the head of this department, is a man of decided views, and these are not always in accord with those of other poultrymen. In a chat some time before the fire he said: "We feed generously and in great variety, such as corn meal, bran, middlings, cottonseed meal, cracked corn, cracked wheat, oat meal, ground meat and bones, and cabbage. All our feed is of the best quality that we can get, and such as anyone would use on his own table. We believe it is the feed and not the breed that makes the flavor of the meat. As proof of this our broilers are all scrub stock, and yet experts have pronounced them equal to partridges in flavor. In preparing for market all our chicks are dry picked and then put into cold water until thoroughly cooled before shipping, and in warm weather we put ice in the package to keep them

"I might add that I use a great deal of skim milk; they have it to drink all of the time. I get it within an hour after it is milked, and while yet warm. The chicks are very fond of it, and I think it will pay better than to feed it to pigs, which bring six or seven cents per pound, while chicks bring 25 cents to 40 cents. I use a little plaster on and under the brooders; it makes them smell sweet. I also use considerable hayseed and chaff in the pens, as it keeps the chickens busy; besides they eat leaves and seed, which does them no



Its

dates back to the early ages of poultry raising, and amidst all the influences that have prevailed for other breeds, the admirers of the Brahma have been the most enthusiastic. Its many qualities of excellence, its fine appearance, and the profit derived from them, have caused them to be termed the ideal and "allpurpose" fowl.



ndard of 25 years ago. From Tegetimer's Poultry Book.

Their antecedents can be traced to the Gray Shanghais, which were large-boned, long-necked, and of great size. Many cocks have been known to reach the incredible weight of 17 pounds. This is of course, in excess of the standard weight of the breed, yet many have been exhibited which weighed from 12 to 15 pounds. The standard weights being: Cock, 12 pounds; cockerel, 10 pounds hen, nine and a half pounds, and pullet eight pounds. It has been urged frequently to reduce the weight of cocks two pounds, which would bring them close to the standard of the Plymouth Rock. This reduction in weight would undoubtedly enhance the value of the breed, as it would mean a quicker maturity, and this means earlier returns on capital and labor invested in producing the bird. There has been no change in shape

and color since 1869; the standard has been the same, and all deviations from this have been caused by neglect or individual speculations of the breeder. Every breed has its own individual type, and the Brahma is more than characteristic in this regard, and is peculiarly different from any other breed.



LIGHT BRAHMA PULLET 25 YEARS AGO. The ideal birds shown in cuts portrays the typical Brahma, and clearly defines the points of excellence in the fowl. The average well-bred Brahma is in hight 26 inches; back from ground, 16 inches; keel from ground, eight inches; hight of tail, a trifle over 21 inches; length of inches; saddle bangers to rear of fluff, two and a quarter inches; eye from tip of beak, two and one-sixth inches; length of head and beak, three and one-half inches; breast to rear of a drop line from point of beak, three-fourths to one and one-fourth inches. As specimens depart from this proportion they will become awkward and valueless as exhibition

stock and often also as egg producers.

The light Brahma male is smooth in plumage of thighs, with close turned be black, the large coverlets (either one hock and properly feathered shanks and or two sets of them) black, laced with the following points are for judging toes. Each lesser sickle reach just even white, except the white at the extreme and scoring the Light Brahma:

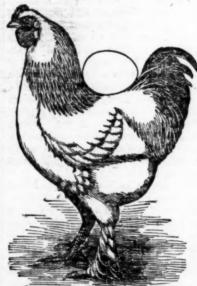


downward slope just in front of hip joints, where the saddle commences and carries the concave line to the tail, are important features of the breed. Since the first adoption of the standard there has been no deviation from the broad skull

overhanging brows, short, well-arche beak and proper arch of hackle and slope of back; these are well defined, and are prominent features of th

The oblong shape and full breast, broad and round, and carried forward, comes from the oval sweep from throat to point of keel. This fulness and prominence gives the length of body, which is characteristic of prolific birds The light Brahma pullet shown in cut is in full muscle development and void of fat, which mated to the well-bred stock will secure the best of results in shape and color. The Brahma, with its almos equal breast and posterior weight, gives us an egg with a slight difference in the two ends, and their curved lines of neck, back, and breast are fine fac similes of the outlines of their eggs. If an egg was large enough it would fit the back of a perfect Brahma male.

The Brahma hen has a broad oval skull, heavy evebrows, a full throat, a heavy, well-arched beak, the comb being smaller than the cock's. Their eyes are in color from pearl to red, and are masculine in appearance, which indicates great control and power. Prime shape of males and females are indications of good breeds, and is encouraging for winners.



THE FELCH IDEAL BRAHMA COCK.

Never sacrifice shape for color only in

the female, as it is impossible to expect

a perfect shape from a poorly shaped sire. A sacrifice of color for shape should only be resorted to to restore shape to the females. The science of breeding comes from mating colors that vary from standard requirements; to preserve a uniform color in mating is a study with charms, and all aims should be exerted in the careful mating and avoid ance of the extreme. The perfect color in the male should be a white neck plumage striped with intense black, with a metallic luster for two-thirds of the length, and covering three-fifths of the surface of the web. The balance of the feather, being the under color, may be black or black and white, resulting in white at the quill end in the upper part of neck. The surface color of the back should be white; the covered part of the web and the fluff a bluish-gray. In the wings the primaries should be black or black and white, although a fine specimen should have fully four-fifths black. The secondaries should be two-thirds white in the lower web, the shafts and a large proportion of the upper web should be tail, a trifle over 21 inches; length of black. The upper edge of the seconda-body, front of breast to rear of fluff, 14 ries should be laced with white, the latter increasing in width as the feathers comb upward. The tail proper, viewed from the rear, is black, with the curly feathers underneath black and white shading into white as they near the fluff. The upper side of the tail should be black till you reach the quill end, which is white, the white extending up the lower web from one to one and a half inches. The sickles, lesser sickles, side hangers, and first set of coverts should

quill end, which is normal to every feather on a Brahma.

The fluff should have the bluish-gray tinge in the under color, with outer ex-tremities white; shank feathers white, with black mottling near the feet.

The pullet head is white, neck plumage a black feather laced with white the lace narrower at the point, which gives the black center a more pointed form than that of the outline of the feather. The fluffy or quill end of th feather may fade to a white if the black retains a solid, metallic luster two-third the length of the web. The black wil

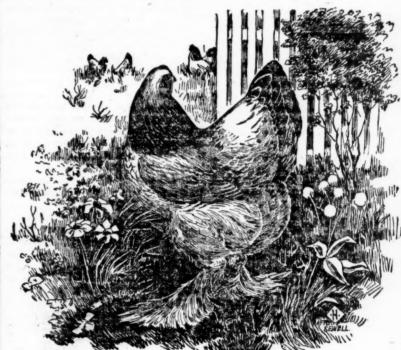
STANDARD OF PERFECTION

A bird ideally perfect in shape, size, color, head, and comb, cushion, or saddle, leg, feathers, tail, etc., and in perfect health and condition, to count in points 100.

If o extraordinary size, add on that account 5

DEFECTS TO BE DEDUCTED

Bad heads and cocks and 5 in h	en	s)							15
cocks and 5 in l Scanty hackle									1
Want of cushion .									
Want of fluff					-			_	- 6
Want of leg feath Vulture hocks Bad shape or carria White in tail	ner								1
Vulture hocks									1
Bad shape or carria	ige	0	t ta	uil					-
White in tail	-								10



LIGHT BRAHMA HEN, "WONDER." This famous hen of Mr. Sewell's possessed for known, measuring in length five and one-lish coloring, and her hock feathers were as

appear to cover also two-thirds of the surface of the web. The cape should be black and white, but completely covered by the hackle when the bird stands with uplifted head. A wholly white web should not be judged defective, but females with white capes seldom give a large percentage of prime males. Back should be pure white in surface color, bluish-gray in the under fluff. The white and the bird be perfect as a breeder. Breast, pure white throughout; wings, primaries, three-quarters black, with black quills, the white of a clear shade. Secondaries, lower two-thirds of lower web white, shaft with lower two-thirds of upper web black, the upper edge and about the point white, this lacing growing wider, the top feathers being entirely white. Tail, viewed from under side black; the upper side black, except the two deck feathers, which are laced with white. The extreme quill end and up the lower web in a normal condition is white, the white extending up one-half to one and a half inches. Tail coverts black, laced with white lesser coverts. The fluff is white; shanks and foot feathering white; but black, mottled plumage should not be cut.

Thus we have a perfect Brahma and one which brings joy to the breeder and admiration from all who may see them. Their noble bearing and fine appearance always calls forth delight from the most conservative person. No one can see a flock of Brahmas without this pleasure, and from egg to maturity its satisfaction to the breeder is well merited. To the farmer it is just the fowl he needs to be profitable, both for eggs and broilers. The breeder recognizes its worth and holds it as the favorite bird in their yards, while the fancier is fascinated with its supremacy over its kindred. All

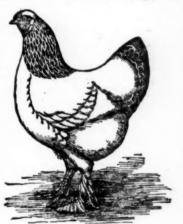


Bred and owned by Chas. M. Griffing & Son, New York.

unite in saying that the light Brahma of to-day is a perfect bird, and its popu-

Primari	ies out	of	ord	ler										15
Pale le	gs													8
Curved	toes.													10
Stain of	white	in	dea	f e	ar									5
Spiasne	d or stre	Bak	y b	re	ast	81	n	da	rk	01	r h	la	ch	2
	S 111 11121	II .												15
Chanle	C 41.	60		- 1			- 4							
Shank	feathers	s (i	n d	ar	<b>c</b> 1	nei	ns	10	ot	De	ane	cil	ed	
Shank as the	feathers body	s (i	n d	ar	k 1	iei	ns	10	ot	p				A
Shank as the Other f	feathers body aults of	s (i	n d	ar	. 1	iei	ns'		ot	P4	:	:		10
Shank as the Other fi Want	feathers body aults of size	s (i	n d	ar		·	ns'		ot	P4	:	:		10 20
Shank as the Other f	feathers body aults of size	s (i	n d	ar		·	ns'		ot	P4	:	:		10 20
Shank as the Other f Want o	feathers body aults of of size of gener	i (i	n d	ar	k l	·	ns'		ot	P4				10 20 15
Shank as the Other f	feathers body aults of size of gener f condi	s (i	n d olor syn	ar	et .	ry	ns'		ot	P4				10 20 15 12

Birds not tolerably matched. Primary feathers twisted on their axes. Utter absence of leg feather. Pinky legs. Large, red or



THE FELCH IDEAL BRAHMA

white splashes in dark birds or conspicuou backs spots in light. Round or crooked backs, wry tails, crooked bills, knock knees, or any other bodily deformity. Any fraudulent dyeing, dressing, or trimming.

### Room for Homesteaders.

An examination of the records of the Land Office at Guthrie, Okla., shows that there are 1,500,000 acres of land in the Cheyenne and Arapahoe reservations in the western part of Oklahoma Territory subject to homestead entry and which has never been filed upon. This is nearly all first-class agricultural land. well watered and partly timbered and can be had for \$1.50 per acre. In Beaver County, generally known as No Man's Land, there are also over 2,000,-000 acres subject to homestead entry. This County adjoins the Cherokee Strip on the west, and much of the land s better watered and more fertile than a large portion of the Strip. These 2,000,-000 acres are absolutely free to the homesteader, the last and only free land in the Southwest. All a man has to do is to settle upon them and live there, and why so many should overlook these free lands and wait for the Cherokee Strip, where they must pay from \$1 to \$2.50 per acre for the same quality of land and fight for it besides, is a mystery

Educate the boys toward the farm and not away from it. It is too often the rule to tell the bright, sprightly boy that he must go to town as soon as he is big enough and be a man among men; to teach them that the farm is a dullard's place. Parents do this and later on complain that their sons will not live on the farm.



MR. MORTON'S HOME, FROM THE LAKE.



See that the hay stacks in the meadow are well secured before the stock is

Fairly strong walnut water is recommended as an excellent wash for horses troubled with insect pests.

The best animals for the farmer are those which keep in a good and thrifty condition with very little difficulty.

Do not feed the horses on an exclusively rough ration at this time of the year, but give a supply of grain

A kind master is one who has the horse's good will, and such a man can get more work out of them than one who treats them harshly.

At this time of the year extra teams are in demand for farm work. It is poor policy to buy them if you cannot keep them in good condition.

It does not hurt the horse now if he allowed to work without shoes. Unless there is an abundance of rocks, it is not necessary to have them shod.

If horsemen would give a teaspoonful of saltpeter in a pail of water twice a week they would find a great improvement in the appearance of their horses.

The appearance of an animal goes a great way in the market, and a smooth, sleek, and fat steer sells more readily and at a better price than one equally as fat, but rough looking. This is a point for consideration.

If animals do not respond to a fatten ing food, something is wrong either with the animals or the food. If you cannot ascertain the cause, it is a loss to continue to try to make an increase in weight, and the best scheme would be to dispose of them.

#### DOMESTIC ANIMALS.

Rules Governing Their Breeding and Management.

> BY T. CLARK ATKISON, PH. D I.

As far back as any recorded history is given man and the lower animals have been associated and more or less dependent upon each other. The science of geology has demonstrated that many years anterior to the most ancient records men and the other mammalia were joint inhabitants of the earth. Those learned in fossiliferous lore have demonstrated many things which seem satisfactory to them and sustain their own of upon what seems to give the modern geologist so much sati-

least the scientist and revelation agree, fore man. Genesis, 1:25: "And God made the beasts of the earth after his kind, and cattle after their kind, and everything that creepeth upon the earth after his kind; and God saw that it was good." Then follows the account blessed them, and God said unto them: Be plentiful and multiply and replenish the earth, and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth." other animals, and he starts out with a commission from his Creator to domesticate and make use of them, and throughout the 6,000 years since creation's dawn they have been so dependent upon each other that they can hardly be separated.

When the flood came upon the face of earth Noah built the Ark that saved the animals from destruction, as they went into it two by two. All nations have had their war horses and beasts of burden. The Israelites had their great sheep-shearing season, and Abraham and Lot grazed their flocks and herds by thousands on the plains of Sodom and Gomorrah. The dog has been man's friend as well as servant. and all through the pages of literature, both ancient and modern, we find records of domestic animals, and the poets sing their praises. And as man has advanced in civilization and intellectual development, we find a corresponding development and improvement of the domestic animals with which he is so in-

timately associated. In the time of the great naturalist Louis Agassiz, he believed that each species of animal was the product of firect, creative action; but Mr. Darwin and other authorities have established that the development of new species is, to a great extent, due to circumstances: to the actions of inorganic conditions upon them or the interaction of species with species in the struggle for ex-

Mr. N. S. Shaler, in discussing this phase of the question with reference to the climatic and geographical changes that have taken place upon the surface of the earth, says "they will struggle with one another for the possession of the new field. The weaker or less perfect

forms will be destroyed, and out of the struggle will come a measure of advance in the character of the new life."

From year to year many changes are constantly taking place throughout the animal kingdom, and "the evolution of life from the lower to higher planes depends in part, at least, on the differentiation of organic species by the survival of the fittest. \* \* \* are contending against each other to determine which is the fittest to survive,' and every species is made to profit by its enemies as well as its friends, as in the struggle for life it is the strongest that survives for the reproduction of its kind, while the weakest have perished.

The characteristic and environments which surround the "cradle of the race" have much to do with the development of the species. It is a somewhat re-markable fact that among the numerous variety of birds and animals found wild in America by the first settlers, this country has contributed but one specimen to our domestic fowls or animals, and that one the wild turkey, which is the

basis of our domesticated turkeys.

The barnyard creatures of Europe with their established qualities, may be brought to America and here retain their native form for many generations, and any change in form or characteristics takes place very slowly, and may improve or decline as the well known principles of reproduction may be conformed to by the intelligent breeder or neglected entirely, as is by far too often the case, by the ignorant or careless

breeder or farmer. The doctors disagree as to the causes of the great improvement made in our domestic animals within the last few years. E. W. Stewart, in his "Feeding Animals," makes this statement: "As all farmers, from time immemorial, have been in the habit of feeding more or less animals, it has been taken for granted that this knowledge came by instinct, and required no study to obtain. When a superior animal was produced an explanation was always sought in the breed-it was always charged to the

"When anything is now said concerning the management of those famous breeders who developed the Longhorns and the Shorthorns from the inferior animals-they began with their skill and genius in selecting the points to be improved and the animals to be coupled representing these in greatest perfectionit is always dwelt upon with the highest admiration. Little else is mentioned. They forget the grand requisite of sucand that is, feeding feeding doctor, and a most excellent one, kind of grass or upon an old field in while other authorities, which we shall which the noxious weeds and briars quote from time to time, are breeding luxuriate, or from which the cream of corded history we find man making use doctors, and frequently they disagree, as the best and richest herbage has been of the other animals as food or beasts do other doctors. In these papers we cropped by your bunch of mules, cattle, of barden, and in one particular at shall endeavor to demonstrate that "blood will tell," and that "Durham viz., that the animals were created be- cattle require Durham keeping," and that success can only come from good management.

The business of stock raising in the United States has grown to vast proportions, fully keeping pace with our rapit was good." Then follows the account idly increasing population. "Farmers, of the creation of man: "And God during the last decade, have given much greater attention to the economical question of stock raising, not only as a source of present profit, but as a means of perpetual fertility to the soil." To give some idea of the magnitude and extent of the animal industry in this country from the very dawn of creation man we give the following summary of statishas been intimately associated with the ties from the March, '93, issue of the American Agriculturist.

The report of the Statistician of the United States Department of Agriculture, upon comparative numbers and values of farm animals sed on returns of January, 1893, shows an increase of horses, mules, and sheep, no ma-terial change in the number of milch cows, a rease in oxen and other cattle, and a very heavy reduction in the number of swine The estimate of numbers is very probably closer to the actual facts than for 10 years, because the census returns of 1890 form an accurate basis of comparison and correction.

The values given are based on the local prices of stock received by farmers at their farm or local depot. These returns for 1893 thus compare with the two preceding years:

Horses. 1803. 1882. 1891. 1891. 1891. 1891. 1892. 1892. 1892. 1892. 1892. 1893. 1893. 1892. 1893 Mulcs. 2,831,128 2,314,660 2,206,532 1umber ... 2,831,128 2,314,660 2,206,532 1umber ... 2,831,128 2,70 \$174,882,070 \$178,847,370 70,68 75,56 77,88 

very slight. The apparent increase in sheep exceeds 2,000,000, a continuation of the movement which commenced in 1889, by which numbers have increased nearly 5,000,000 in numbers have increased hearly 5,000,000 in four years. In the case of swine, there was a small pig crop last Spring, and the late ad-vance in pork products has caused the slaughtering of some portion of the stock of mature animals. As the average age now at-tained by these animals is less than a year, there is a liability to extreme fluctuation in numbers, which is possible of no other species Cows have not increased in number sufficiently

to keep pace with the demand for their products from an increasing population; hence the firm state of the butter market. Average values have declined as to horses and mules, advanced as to cattle of all kinds;

a greater gain appears in the value of sheep, and a very large advance is seen in swine, amounting to 39 per cent., and progressive since the returns were made. The total makes an interesting exhibit of values, showing that the total value of all our farm animals

Total Value. Over Previous Years \$2,483,500,678 Increase \$ 21,750,998 2,461,755,678 131,967,908 2,829,787,770 Decrease 88,978,256

Pen Notes.

Do not let the young pigs roam with the fattening hogs. The reason is that they lay on too much fat to grow well. Give the fattening swine all they can possibly eat at each feeding, but do not allow any to remain over.

There is no special advantage in having growing and breeding animals fat. In almost all cases better results will be obtained if they are kept in a thrifty

It is predicted that pork will bring a good price next year. The present financial stringency has caused many farmers. to sell off very close, too close, in fact, to stock up again as quickly as was ex-pected. Another reason for the prediction is that many farmers and breeders sold a good many of their stock hogs in order to secure the good prices which have been ruling.

#### Too Much Corn to Hogs. EDITOR AMERICAN FARMER: There

is hardly a single farmer with whose system of farming I am familiar but feed too much corn to his stock hogs. Farmers generally complain because they rarely, if ever, get price enough for their hogs at killing time from the buyers, and say it costs so much to fatten them that hog raising is unprofitable. I agree with that class of farmers exactly on this point, for no man can afford to feed corn to a hog from weaning time until it is ready for the butcher, and sell it at current prices, no matter what those prices are; in other words, a hog fed on corn all its life from a weaning until fattened, "eats its head off" twice over, and can never be sold for slaughtering purposes at a profit. I have often been amused at farmer's ideas on this subject. They say, "I had the corn, plenty of it, raised it myself; bred and reared the pigs; therefore, I can afford to keep corn in his pen all the time, and sell him at a fair profit." The folly of such reasoning is too transparently absurd and ridiculous to deserve serious consideration. It certainly requires no argument to refute its fallacy. It is simply foolish, idle talk. Were it no better to sell the corn and pigs, too, before the one destroys the other, and thus save the whole rather than permit the hog to eat really more corn than the price he would be sold for at delivering time would buy? It seems to me that this would be the better and more sensible practice. "Well," you ask, "how can the matter be remedied?" Easy enough, to be sure, and a few thrifty farmers follow the plan out exactly. Feed more grass. These three words contain and explain the entire theory of that practice by which anyone can make hog raising, barring the cholera, as profitable as the raising of any other kind of stock, if not more so, on account of their ready sale Mr. Stewart is a and stock hogs upon a short crop of any or horses, and then expect your hogs to flourish, grow, and fatten for the market, without feeding corn at all. By no means; for hogs kept on such pasture must have corn, and that in ample quantities every day, if you would realize

nything from their growth. The man who has the ground that will bring corn also, as a general thing, has ground that will produce clover or rve, perhaps both, which is far better. The plan adopted by the best hog raisers I ever knew, and the most universally successful in all respects. adopted and implicitly carried out the following rules. He was a small farmer, but his rule will apply equally well to large farmers. He generally sold about 50 head at slaughtering time, besides keeping about 15 to 20 for his own use and to sell to laborers when cured. His plan was to always have about 35 acres each in clover and rye, and when the clover was in full growth he turned in his smaller hogs, and when it was in bloom all of them were put in, where they remained until the rye was ripe enough for them; then he turned all of them on that to eat it down. In this way both the clover and rye re-seeded themselves for years in succession.8 Before the clover came there was always a good blue grass pasture for them, on which no other stock was ever permitted to roam. These hogs, at the proper time, were always given the gleanings of the wheat and oat fields, and they never had an ear of corn after the middle of April until the 1st or the 10th of October. Salt was always kept in their range, to which they had access at all times. By this simple and cheap plan he always had healthy swine, and he was enabled to put them on the market in the best possible condition, and having fattened them on a small quantity of corn he, of course, realized handsome profits. This course of treatment, being cooling to the bowels and vital organs, kept them freed almost entirely from kidney worms, blind staggers, cholera, etc. Water of the purest kind, either from ponds or running streams, they had constant access to. If our farmers who feed corn almost continually, and who complain of the unprofitableness of hog raising, will adopt the plan here-in set forth they will have far better

See our remarkable offer on another

success and less grounds of complaint.

A FARMER, Columbiana County, O.

## SHEEP AND : WOOL.

Shearings.
The wool clip of Saint Clair County, Mich., will amount 19,400,000 pounds. A good authority states that the wool 1,500,000 pounds this year.

If the conditions are poor and bad the flock will soon become suited to parasitic troubles, and "don't you forget it!"

Weaning is a critical period in the life of a lamb, and should always be done with much consideration and judg-

It is better to have a small flock of the best sheep to start with than a large flock of poorer ones, or a bargain in sheep that are not right in every way.

ing the hurdle system of handling sheep as practiced by the English, and find it has many advantages over the old pasture method. The dry, hot, Summer weather is the

The French sheep farmers are adopt-

hardest time on flocks. Dry, hot winds, no shade, no grass, and no water must tell on thrift, health, and condition. Read this again.

The really successful sheep farmer, one who knows what he is doing, under stands himself, his farm, and his stock, will always be able to breed a better animal than he can buy.

On no account omit attention to the udders of ewes after the lambs are taken away to be weaned, or the best milkers will have spoiled bags, and be practically ruined for breeding purposes.

There is a kind of sheep that the more a man has of them the worse off he is. It is a pity that a man can't buy a share of sheep sense as easily as he can buy some good sheep.

If you are so made that you have to have a dog on the farm, take pains to have the sheep so well acquainted with it that they will not be scared at the presence of a dog in the yard.

The New Mexico Sheep Breeders Association organized at Las Vegas recently for the protection against the depredations against sheep thieves. There were 40 charter members

There are lots of sheepmen that are 'not in it" when progressive breeds and methods are sought for. They talk progress and look for progress in other men, but do not practice it themselves.

There has been an unusual activity in importing Dorset sheep into this country this season. The importers are all men of high character, and their selections are exceptionally good in every respect, The Australian Government has a

law requiring all sheep to be dipped. More than this, they have decided upon a standard dip, and the law is enforced with severe penalties for disregarding Why do not the poverty-stricken, tax-

ridden, discouraged Virginia planters sell or give a part of their unproductive holdings to young men who will lead out on new lines of profitable sheep farm-

but little to do, nor would we, if we guished above their neighboring farmers, you to turn your sows and pigs, shoats 267,424,468 cattle; 59,427,658 horses. go to market six to eight weeks old as can raise sheep without limitation. It is noticeable that the sheep outnumber hogs, cattle, and horses 91,026,014

The demand for fat sheep is well maintained and the prices seem undisturbed save in one instance by the unprecedentedly large supplies. Chicago took 50,000 sheep last week without flinching, and prices even advanced.

It is found that the finest fleeces grow in the warmest climates as often as otherwise. This is in marked contrast with the old theory that cold is essential to the growth of fine wool, and that warm climates are unsuited to any but the coarsest fleeces.

There is much complaint of sheep doing badly since they were turned to grass. If anyone followed our advice in continuing to feed grain to their sheep for a few weeks until the grass had more quality, we should be glad to hear from them about the welfare of their

It is quite astonishing how a flock of sheep will keep in condition on the shortest pasturage during the growing season. It is here that sheep get the reputation of living on nothing. It is, however, a fallacy, and a close inspection will show that there is a supply of tender, sweet, rich pasturage.

How few men know anything about the care and management of live stock other than came to them from their forefathers. The generations that come after, like those that have come before, must learn by experience to select and direct their live stock husbandry according to the changed conditions of trade and agriculture.

It is hinted that there are 50,000 sheep in the mountains of Apache County, Ariz., owned by New Mexico parties, that escape the tax collectors of both Territories by being driven from one Territory to the other. This is evidently intended for a joke, since everybody knows the proverbial honesty of sheepmen in general, and of the West in particular.

There is more hope for the young sheep raiser who has his eyes and ears wide open to learn than for the old sheepman who thinks an experience of years entitles him to know all there is to now about the business. The young sheep raiser has only the future to deal with; the old sheep raiser has the past to guide him, and the past is now historic, but not practical.

After sheep shearing it will often be noticed that the lambs are losing life and condition-they will be found on the downward grade. An examination will show that they are tormented to try.—J. W. CHAMBERLAIN, Richardton, death by ticks. All the ticks of the N. D.

flock go to the lambs as soon as sheared. The sagacious owner will not fail to dip the lambs and thus rid the flock of these miserable little pests.

The scallawag sheep and the scallawag flock owner will stand no show in the coming cyclone that will strike this country when the free traders get in their work. It will be found that good sheep, suited to the wants of the meat and wool markets, meeting the needs of agriculture, and well taken care of, can alone endure the strain and maintain the credit of sheep husbandry in this country.

An exchange voices our sentiments in the following: "Sheep are hardy and able to stand rough weather, and even to partly starve without dying, but they do not yield their best results from such neglect. The experiments in feeding have resulted in a complete change in the wool of certain breeds, and it is a fact that mutton quality and quantity, both considered, is generally improved by systematic feeding.

At Starkville, Miss., while the writer was making an investigation of the sheep industry, an inquiry as to where the A. and M. College people got their mutton, we were referred to a farmer a little out of town. This man was interviewed with some interest. He was doing a good business in furnishing a fairly good article of mutton to the A. and M. College. He liked the home trade, and always sold on orders.

Attend the Farmers' Institutes and take part in all the discussions. Don't be afraid to ask questions, but pitch in; it helps to make things lively. If sheep are not on the program, switch the Institute over onto sheep and lambs and show the management what you want to know; they make mistakes just like other folks. Sheep should be a topic of discussion in every Farmers' Institute, Farmers' Club, Grange and Alliance Organizations and Board of Agriculture.

Stock Grower, Las Vegas, N. M.: The unsettled feeling over the uncertainty of the wool market has caused the price of wool to drop materially in New Mexico; but good mutton sheep still hold their own, and there seems to be no probability that it will be otherwise for some time to come. It is impossible to foretell what the effect of an extra session of Congress would be on the sheep raisers, because no one can say what will be the outcome of such a

It is creditable to the intelligence and enterprise of several Western States and Territories that a scab law has been enacted and rigidly enforced by the appointing of a suitable officer with an efficient corps of deputies. It would be well if every State of the Union had a law, not only requiring treatment of Northern market has confirmed these scab, but of ticks, lice foot rot, and all classes of parasites that prey upon the anything about protection, which all sheep industry. As we see the probable other intelligent sheep raisers feel is shortening of margins in profits, the in- the all-important question to-day that creased vigilance will bring better laws confronts them. To Texas flock owners on this subject.

It is the practice of many Virginia ewes as soon as the early lambs are sold. Ewes that are in good condition and vigorous health, with such feed as will preconceived theories with these specularity theories. This practical age has breeders would have been little distinrequest and go at good prices. This practice would be hard on the ewes if the lambs were suckled, but a few weeks is not so severe a strain upon the system of the ewe.

The season has been quite exceptional. and farmers have not found time between storms and the push of work to keep run of the flock, and many old and thinnish sheep have succumbed to the inevitable. For instance, in a ramble over a familiar pasture a few days ago we found a sheep had attempted to pass over some soft ground-a slide from a bank above-and had mired hopelessly in the soft clay. The owners, one was a woman, too, had neglected to count the sheep once a day, and hence knew nothing of the missing sheep. They were not readers of THE AMERICAN

### Wild Sheep in the East.

One would hardly believe that there are wild sheep on the Atlantic coast, but such a story comes so well authenticated that little doubt of its truth remains. Thirty years ago a man put a few sheep upon a rocky island at the entrance of Penobscot Bay and let them "shift for themselves," Summer and Winter. They are corraled once a year and sheared. No other attention is paid to them, yet they have increased in numbers to 250 head. In Summer they subsist upon wild grass and other herbage, and in Winter they feed and browse upon sea weeds thrown upon the beach. Although the usage is rough, they are free from the depredations of dogs and wild beasts of prey.

### Good Lambs From North Dakota.

Mr. E. C. Palmer, of Williams County. has pure bred, registered Shropshire sheep and runs them like common sheep nine months of the year. He has used registered rams of his flock on common range ewes for mutton lambs for the Chicago market. The last three crops at five months old gave an average weight of 69, 70, and 60 pounds, for which he received, respectively, \$5.85, \$5.20, and \$4.35.

### Favors Our Stand.

EDITOR AMERICAN FARMER: I am in receipt of two copies of your valuable paper. I heartily indorse your action petitioning Congress to allow the tariff to remain intact on wool. If there is any industry needing protection it is wool. I will proceed to circulate a petition at once, as I am a wool grower and much interested in the wool indus-

#### TEXAS WOOL GROWERS.

An Important Meeting of the Association, and a Look Ahead.

At the late annual meeting of the Texas Wool Growers' Association, held in the city of San Antonio, there was reported a good attendance. Much interest was manifested in purposes and measures looking to the protection and extension of the sheep industry as it exists in that State.

Judge Standart, the temporary chairman of the meeting, due to sickness of President L. B. Haynie, "advised the delegates to discuss the all-important questions of the day and put old issues aside. The exterminations of coyotes was the all-important subject at the present moment." He said: "The problem of ridding the State of Texas from coyotes should absorb the attention of every sheepman, and the subject should not be dropped until some concerted action was taken to eradicate the

This was the only question discussed. The annual election of officers, and "a committee appointed to confer with cattle-raising associations, with a view to consolidating their interests and working to secure better live-stock legislation, was the whole work of the convention.

The confining of discussions to wolver and pests by the Texas flockmen at this time cannot be accounted for on any other ground than their political predilection.

This is the more astonishing when the character of their mutton industry is considered. It is known that millions of Texas sheep are sent to the Northern and Eastern markets. These cheap sheep find sale at fair prices, considering their character, and can be raised at so small cost that they can compete with anything they meet in the Northern markets.

The supposition has been that protection is as important to the Texas sheep raisers as to the Ohio sheep farmers; that wool growing in Texas would be ruined by free trade as effectually as it would be in Ohio, especially with the grade of wool produced in that State. Here, then, is a pointer. Not one

word of protest against free wool was spoken by anyone at the convention of Texas wool growers, and a full meeting was in attendance from the State. The all-important question was how to rid the ranges of pests that prey upon sheep: that hinder the increase and extension of flocks. Is it true, then. Texas flockmasters propose to pin their hopes and expectations of prosperity upon the production of a low class of mutton? The opinion has been growing with us for some years, and the great numbers of sheep that have been unloaded upon the suspicions. Texas sheepmen do not care the tariff is "an old issue," not consider able enough to be discussed even with amb raisers to put the ram with the free wool and woolens staring them in the face, so near and so certain as to paralyze the sheep, wool, and woolen in-

dustry of the country. All the Texas sheep raiser asks, is get rid of home hindrances-wolves-so he

It is safe to conclude that these men have well and carefully considered their chances; that they know what they can do, and that they know what they want, and that they can do it.

They will continue to flood the market with a low class of sheep, as they have long done with a poor class of cattle, and cut the prices for the careful intelligent farmers of the North and East who take the greatest pains to produce

high grades of stock. The Texas stock growers know they can, as they have command of the mar kets and control, or at least keep down prices by the vastness of numbers, and make better profits than are realized by growers of good animals.

They have accepted such protection as is within their own control and given up the scheme of National protection to those who think it worth while to continue the fight in the halls of Congress. They have taken this stand, no doubt, after deliberate consideration and calculation and quietly placed themselves on record as the most formidable competitors of the sheep raisers of this country. The issue is well taken, and the chances of successful competition are largely in favor of Texas, with its genial climate for breeding animals at a minimum of cost as compared with the great agricultural States of the Union.

Texas has taken the initiative before the free trade storm has come upon the country, when self preservation will oblige the looking about for opportunities to successfully compete for profits in flocks and flock culture. Texas may be regarded as formidable only in cheapness; but again, cheapness governs the whole situation and can compete.

### PROFIT IN THE BUSINESS.

#### A Wyoming Sheep Raiser Gives His Yearly Earnings From His Flock.

EDITOR AMERICAN FARMER: I SAW n the issue of July 1 an article on "The Wool Growers' Complaint." In this section it is quite different. The sheep industry is the best business there is in the State. Mutton sheep are selling at \$4 per head and dock sheep at \$3 to \$3.50 per head, and in good demand. I have 3,000 sheep, and care for them

in this wise. The camp wagon, which is covered with canvass, carries a bed and is filled with straw; cooking utensils, and provisions enough to last the herder for some time are put in, and the wagon is hauled by a good strong team. This wagon is used by header, who haul it from place to place, as the sheep demand a new pasturage.

and he is supposed to watch the flocks ville Railroad, Washington, D. C.

and keep away dangerous animals. At shearing time he brings the herd around to a railroad station where there are shearing pens. The flock is here sheared. each animal giving from 10 to 12 pounds of fleece, which is sold at 12 cents per pound, giving the value of one animal at from \$1.25 to \$1.50. The cost of

shearing is 10 cents per head. If your sheep are in good condition you are sure of 90 per cent. of the lambs which will be delivered in September. These bring \$2.25 per head. The loss of lambs has not exceeded five per cent. for several years in this section, which is a very small loss. Now, if there is any better business in your section than sheep raising, let me know. You can see what the net profit is in the industry. My wool clip and lambs are worth annually \$8,585, my expenses are \$1,200, and my net profit is \$7,385 .- A SHEEPMAN, Lusk, Wyo.

#### A Fine Ewe.

EDITOR AMERICAN FARMER: In your paper dated May 15 you ask me to give you a history of the Cotswold sheep which furnished the wool that I sent you. I will give it to you as the owner of the sheep gave it to me. The animal is three years old; it was shorn when it was one year old, but not since. The dam belonged to one Jackson. When she dropped her lambs she had three, and Mr. Jackson gave this one ewe lamb to its present owner, Mr. Johnson. It was raised by hand on cow's milk, and when it was old enough, it was placed in a pasture with hogs, and has been kept there ever since, sleeping and eating with the hogs. It eats corn and drinks swill with them. The pasture which the animal is kept in has a variety of food that agrees with it. She has blue grass and clover to eat whenever she wants it, and also has the small prairie willow and the laurel, or as some call it, the chinquapin oaks and hazel brush to browse upon when she wants the bitter part for a ration, which keeps her healthy. Every man who keeps sheep in this part of the country knows and realizes the value of brush for sheep to run in during the Winter months and to have the liberty to browse on the same during the daytime, and a com-fortable shed to lie down in at night.

This ewe has not been sheared this season, and she is fat and healthy, and the wool is firm. She does not show the least sign of becoming loose and of

falling off.

Mr. Johnson says that he cannot afford to spend the time to shear that sheep and then sell the wool at present prices, 14 cents per pound. He thinks that that sheep can carry its wool through the present term of Mr. Cleveland's Administration or die in the attempt. If this animal is shorn this Summer, I will send you the weight of the fleece as soon as I get it. . The reason that I did not reply sooner, I was waiting for the sheep to be shorn, but when I found that there was no prospect for that I send you this .-LAFAYETTE TORREY, St. John, Mo.

#### Record of Transfers of Pure-bred American Southdown Stock.

Cassius 5598-C. M. Clay, White Hall, Ky., to Jesse K. Cope, West Chester, Pa.
C. M. C. "B 217" 5593—C. M. Clay to
Charles E. Barker, Pembroke, Ky.
Princess Louise XVI. 5142—J. R. Harvey,
Turlington, Neb., to W. E. Spicer, Harvard,

Neb. E. F. B. (199) 5962—T. C. Douglas, Galt, Ontario, Canada, to R. L. Burgess, Burgess-ville, Ontario, Canada. Olivette 4387 and Miss Mollie 4388—W.U.

Noble, Brecksville, O., to J. A. Irion, Galli-Dempsy B675-H. A. S. Hamilton, Fisher-

ville, Va., to W. H. Frazier, Ninety Six, Warnham 5661-John Jackson & Sons, Abingdon, Ontario, Canada, to Leste Bashford, Hollowville, N. Y.

21 " 5642-Wm. Martin, Binbrook, Ontario. Canada, to Lester J. Bashford. Simenton Ewe "5" 5758 and Simenton Ewe "12" 5222—A. Simenton & Sons, Blackheath, Ontario, Canada, to Geo. Me-

Kerrow, Sussex, Wis.

Dale Ewe "6" 5907—D. H. Dale, Glenlale, Ontario, Canada, to A. Tolfer & Sons

Paris, Ontario, Canada. Ramona 5916, Beacon 5917, and Brilliant 5918—John Miller, Markham, Ontario, Canada, to Geo. McKerrow.

Lavender 5660 and Jackson Ewe "56 A" 5968—John Jackson & Sons, Abingdon, Ontario, Canada, to D. J. Jackson, Abingdon,

Ontario, Canada.

Casciole 5545—Levi P. Morton, Rhiue cliff, N. Y., to Fred Lewis, Spencer, N. Y. Sedgwick 5567—Geo. K. Boutelle, Waterrille, Me., to P. B. Friend, Sedgwick, Me. Bennington Ewe "2" 5527 and Bennington Ewe "1" 5526-T. B. Bennington, La Porte, O., to Geo. S. Kuder & Son, Tou-

togany, O. Caput 5273—A. J. Alexander, Spring Sta tion, Ky., to S. P. Clay, Lexington, Ky.—S. E. PRATHER, Secretary, Springfield, Ill.

#### The Piedmont Region of the South-The Best Country Under the Sun." After the war a heavy emigration began to

the West from all the Southern States, which continued several years. In late years, howpeople are leaving the West and are settling in all parts of the South. The experience of those who have lived in both sections is that while the yield per acreage is not so large in the South as in some parts of the We haps, yet the net profits for a series of years are quite as satisfactory and life far comfortable, as the farmer does not have to contend with frequent and protracted drouths destructive cyclones and caterpillars, and long, dreary, and severely-cold Winters. Taking into consideration the climate, es pecially that of the Piedmont region of Virginia, the Carolinas, Georgia, and Alabama traversed by the Richmond & Danville Rail road system, with its advantages of good markets, cheap lands, pure water, and perfecschool systems, unquestionably the "Best country under the sun," especially for the tiller of the soil, the manufacturer of cotton, woolen goods, and tobacco, is that situated between Washington, D. C., and Birmingham, Ala., along the eastern slope of the Blue Ridge Mountains, where all classes of citizens are prosperous and happy and a good livelihood can be had with minimum exertion. Outdoor work can be done every day in the year, and storms, destructive alike to life and property, are not feared as in other sections of the Union.

Map folders, showing time schedule and extent of Richmond & Danville system of

roads, and circulars descriptive of land, cli-A herder is hired at \$40 per month, mate, etc., can be nad on appreciated A herder is hired at \$40 per month, Passenger Department, Richmond & Dan-

"You arrest me?"

"Yes; for the murder of William

"But, my dear sir, I am absolutely

"I hope so, sir; but that does not con-

cern me. You will have the opportunity almost immediately of producing

the proof."
"If I cannot see him before his death

fered too much poverty not to look upon

"Come with me. Let me have as

opportunity of speaking with you," said

His companion followed him unwill-

waiting for the baronet's invitation

seated himself in the only chair which

" Pray tell me what all this means."

said Sir Henry, anxious to know all and

wondering whether after all he might

HE LOOKED OUT OF THE WINDOW.

"This morning, when Mr. Murray's clerk arrived at the office, he found his

principal shot through the heart, dead,

affair, I being one of them.
"We learned that last night—the

late hour. I caused that person to be

he had paid with a bank note indorsed

written with his own hand.

such a late hour was yourself!"

ou a confident as to my no

"I don't see how I can."

few words as possible.

baronet's position.

hree days' time.

all the same."

rection.

at his costume.

of you to let me go.'

not forget to reward you.

fear.

the baronet, and he hastily did so in

"I indeed pity you, sincerely," said

"Give me three days' grace. At the

myself up of my own accord. I swear

"You shake your head! Look," said

Sir Henry, entreatingly. "Here is my

purse. Take all it contains. I only

want sufficient for my journey. The rest belongs to you, and I give you my

promise to come and give myself up in

"It is very little that I am offering

ou, but directly I get possession of the

nheritance I swear to you that I will

"But if I should let myself be over-

come by compassion I don't see how I

could help you," said the man. "I have no wish to deceive you. At every

station there are police officers with your description. If I let you go free you

will fall into their clutches, so it will be

"Yes; but cannot I disguise myself?

will do anything you wish, but I beg

"But how can you disguise yourself?"

Ten minutes after the young baronet,

having put on the stranger's corduroy trousers, black coat and cloth cap, had

gone forth into the street and leaped into a cab, while his protector, in the

new clothes, had taken another di-

"Luckily, I have another suit in my

bag," said the baronet to himself, throw

ing himself onto the seat and glancing

He reached the station in time to get

of the strange crime. He had hardly

thrown his portmanteau into the car-riage when the train started.

"At last," he murmured, settling him-

But in an instant after he looked out

of the window, terrified as though a per-

son who was standing there under the

This person was William Murray, the

As the train moved off the baronet

maintained his gaze through the win-

station awning had been a ghost.

self in one of the corners.

murdered banker.

Sir Henry had a lucky thought.

the man, interesting himself in the

"Then, why can't you help me?"

His companion cooly proceeded:

ginning to observe them.

the apartment contained.

Murray yesterday evening in his office."

OOD EVENING!"

I am a police officer, and I am sorry to say you must consider yourself in my liam Murray, raised custody." his eyes from his

ledger. He was somewhat surprised, for he did not expect any clients at that hour, at which, as was usual, his office was closing.

The new arrival was a well built, tall, young man, badly dressed. He had entered as the clerk was leaving.

"I was afraid I should be too late." said the visitor, whose voice agreed better I shall remain a hopeless vagabond," with his aristocratic face than did his thought the young man, who had sufwornout clothes.

"Permit me to ask how I can serve the prospect with fear. you," said Murray, without getting up to receive him. "I beg you to be as quick as you can, Sir Henry, because I want he, as he noticed the passersby were beto get away."
"I will tell you at once," replied the

young baronet. "I come to ask you for | ingly to his dingy room, and without the loan of £200." Murray eyed the young fellow from

head to foot. "And the guaranty?" he said

"My prospects. As you know, I am the presumptive heir of Lord Hervey. I not find some means of pursuing his am the nearest of his relations."

Murray laughed sarcastically. "Sir Henry," he said, " you know very well that you are somewhat inexact. I know from a private source that Lord Hervey has sworn not to give you another penny, and I think you will believe me when I say that I am perfectly well

The face of the young fellow did not change in the least.

"But the reason I have called upon you," he said, "is because you know the friendship which your brother-in-law, who is my grandfather's lawyer, has for me, and I want to show you this letter, which he has written to me":

DEAR SIR HENRY: I have at last the pleasure of sending you a friendly word. Your grandfather, whose health has changed for the worst, desires to see you and bless you before he dies. I advise you to come as quickly as possible. Your old friend, B. JAMESON.

This is really the signature of my brother-in-law," said Murray, after he had read the letter.

"And my best friend," continued Sir Henry. "If he knew the conditions in which I am he would certainly help me.' "Why do you want this assistance

from me? "Precisely because I want to go to my grandfather, and I require some for the journey."

"Ah, well, I run a risk now and then." "Excuse me," interrupted Sir Henry :

"but I hear some one moving in an adjoining room. "You must have been mistaken," said the banker, after looking. There is nobody there. Let us return to our business. I can only let you have

"Very well, give me that," said the young man, "and make out your re-

ceipt. The following evening Sir Henry was another man. He had been running about all day engaged in the most varied

and agreeable occupation-in paying his debts, in rigging himself out anew. At 6 o'clock in the evening he received from his grandfather's solicitors

the following telegram: The condition of your grandfather is much worse. He will not alter his will until he

sees you. Come immediately. He hastily packed his portmanteau.

A few minutes now would decide his lot, either make him the heir to an estate of £30,000 a year, or leave him as hard up as he ever was, to be reduced some day, perhaps, to beg his bread.

He went into a neighboring hotel, took up a railway time table to find out the quickest and shortest route, fit a cigaret and then started for home.

"I beg your pardon, but could you oblige me with a light?"



The speaker was a man dressed in dirty, well-worn clothes. Poverty had rendered the baronet considerate of others. He stopped at once and gave the man what he re-

"A fine evening," observed the latter, continuing to walk along by the side of the baronet. "Yes," replied Sir Henry. "Good

He had reached his lodgings, and was preparing to go in when the man stopped

"Wait a moment, sir," said the man, placing his hand upon the baronet's

"Well, what is it?"

"Nothing, except to tell you, Sir shake and took up the paper.

" If he really was killed, I shall soon know!" he exclaimed.

He looked all through the paper, but

could not find a word about the crime. Another piece of news, however, attracted his attention. It was the promise of a reward offered by the police authorities to whoever should give information leading to the capture of an adventurer who had for some time been going around the city committing acts Henry Merton, that you are arrested.

black jacket, and corduroy trousers." With feverish haste Sir Henry took from his bag the spare suit of clothes with which he had provided himself, rapidly arrayed himself in them, and as the train passed through the short tunnel before reaching the station he flung the property of the wily swindler out of the window.

Twenty minutes after he had reached

honey immediately upon the cessation of the flow. If left on the hive, the bees will glaze the surface of the cappings with propolis, besides covering the section with a heavy coat.

As soon as the hurry of removing the

his destination his grandfather passed away, and he was the possessor of an estate and income of £30.000 per annum .- Chicago Post.

# NOCTURNAL TRAPPING.

Catching Insects at Night by Means of Lights. Recently a good deal has been talked

about the novel manner of catching insects by means of lights after nightfall. At the Ohio Station a test was recently made to determine the effectiveness of the method.

The question of attracting insects by the aid of lights in order to destroy them is one which is often brought to the front, and on the value of the measure there is a wide difference of opinion.

From the fact that large numbers of insects are caught in this way, the impression has been gained that the measure must necessarily be a good one, and especially is this opinion adopted by those who do not know the relative value of insects, or even understand that some are friends instead of foes. There is, it appears, also another point still more likely to be overlooked, and that is that the majority of even the very injurious species thus caught are males. May 1. 1889, the Entomological Department of the Cornell Agricultural Experiment Station set six lanterns, at considerable distances apart on the University farm for the purpose of determining their value as an insecticide.

Each trap consisted simply of a common lantern set in water, the surface of which had a thin film of kerosene upon it to facilitate the destruction of the insects caught. The lanterns were kept seated in his chair. The police were at once sent for and made inquiry into the burning every night until Oct. 15, or until no more insects were attracted.

The captured insects were taken from the pans every morning and placed in night of the crime-a person had been alcohol, those from each lantern being seen to leave Murray's office at a rather kept separate. So many outside influences, as other lights, the smallness of watched, and learned that he made sevthe area covered, etc., entered into the eral purchases to-day, among others some case, that practically no results were obfrom Smith & Blake, the tailors, whom tained from the different locations of the lanterns in the number of specimens with the name of the banker, Murray, caught in any of the species thus far studied. "The person who paid them that note and left the murdered man's office at

An immense amount of material was taken, representing nearly every order "I will give you now an exact acof insects, though the moths included a majority of the specimens. Several count of how I passed my time and make species of cut worm moths, the appletree tent caterpillar moth and all the May beetles taken in the lanterns have been determined. From July 17 to August 18, 1889, there were captured by the aid of these lamps 601 adults of the tent caterpillar, and of these 513 were males and 88 females. Of the adults of the two species of cut worms, there were captured in the case of one end of that time I will come and give 2,240 males and 142 females, and in the t. When I am reconciled to my grandother 22 males and 9 females. Of the May beetles, the parents of the white father I shall have nothing more to grub, in 1889, 297 males and 37 females, and in 1892, 230 males and 15 females. This great preponderance of males over females has also been noticed in every other species of the trap lantern material which has been studied, of

whatever order. It indicates that the males are much more active than the females, and is of the greatest importance when considering the insecticidal value of the trap lantern: for undoubtedly many of the males have copulated before being caught, and enough others remain uncaptured to fertilize the remaining females. Therefore the perpetuation of the species is provided for, and the insecticide value of the lantern is rendered too small to be practicable. It will be well to keep in mind the possibility that the ratios between sexes may be similar among the beneficial insects caught, and thus the injury caused by their capture be less than we have heretofore been inclined to believe.

### Going to the World's Fair?

If you are, go via Cincinnati and the C. H. & D. and Monon Route. The superb train ervice of this line between Cincinnati and Chicago has carned for this line the title of the "World's Fair Route." It is the only line running Pullman Vestibuled trains with dining cars between Cincinnati and Chicago. The C. H. & D. have issued a handsome panoramic view, five feet long, of Chicago and the World's Fair, showing relative heights of the prominent buildings, etc., which will be sent to any address, postpaid, on receipt of 12 cents in stamps. Address, E. O. McCormick G. P. & T. Agt., "World's Fair Route," 200 West 4th Street, Cincinnati, O. Be sure your tickets read via Cincinnati and the Cincinnati, his ticket and to buy an evening paper, so that he might find out the particulars

Our correspondent at Barre, Vt. writes: "The season for honey is nearly over here. The crop is short in this immediate vicinity. The weather has been of the worst kind during basswood bloom! All the bees got they got from clover. In some sections they have done far better. No definite reports as yet."

The Oregon Improvement Company have exhibited at their office at Colfax, that State, six turnips which aggregate dow, but suddenly he gave himself a 102 pounds weight, the largest weighing 26 pounds two ounces.

# THE APIARY.

### CATHERING HONEY.

#### The Vermont Method of Removing, Preparing, and Marketing Comb Honey.

EDITOR AMERICAN FARMER: The time has now arrived when those who of reguery with the greatest audacity are fortunate enough to have a crop of honey will need to remove the same from the bees, prepare, and market the He continued his reading:

"The adventurer wears a cloth cap, a same. At the time I write the Vermonter should be removing his honey; honey immediately upon the cessation

As soon as the hurry of removing the honey from the hives is over, the clamps should all be sorted. Those with but few completed sections should be worked first, the completed sections removed carefully cleaned, and sorted; the honey should be extracted from those partly filled, and after being cleaned by the bees they should be placed in clamps

and put away.

I do not believe in putting a grade of honey on the market known as "light weight." A large per cent. of this grade is usually made up of those sections not near sealed. Better have the comb honey placed upon the market sealed. Let the unsealed go, as it should, in the extracted class. I firmly believe that three grades of comb honey will cause less trouble than more, and answer all practical purposes just as well. I have made a practice of sorting the honey into three grades just as fast as I clean it. I have never found a better time to judge of the finish and weight of a section of honey than when I have it under examination and in the process of cleaning. Further, if you ave your crates ready, as they should be, it is far better to put the honey directly into them. Those who will succeed in the business of honey production Dr. A. B. Mason. Nebraska, Wisconmust save all labor that can be avoided. Make every move count.

The cleaning of section comb honev is to many a disagreeable part of the work Some will have the propolis scattered quite thickly over the whole shop, while others will succeed in cleaning their honey and keeping clean themselves. To belong to the latter class one must be very careful and clean up every time he moves from his seat.

The work requires a short, stiff knife, very hard temper, and quite sharp and pointed. That is, I like this kind best of any that I ever tried. The knife must be held firmly in the hand, and the operator must attend strictly to his work, for a slight slip is liable to ruin a nice section of honey, and a few spoiled ones will destroy the day's work. I to the Canadian he think it important that the section be thoroughly cleaned. The cleanest work

always makes the best appearance.

The crates should also be clean, white wood, and in the bottom a sheet of good, wrapping paper should be placed, having its edges turned up one-half inch. For a market near home I can see no use in having glass on only one side of the awards being adopted by the World's crate, and I would have nothing on the Columbian Exposition is a peculiar one, sections: but if you must have the sections "done up" I know of nothing su- many foreign exhibitors and some perior to " wood sides," made of the same | American. So far as it is understood at wood and of the same thickness as the section, nicely fastened by a paper hinge. They are a perfect protection to the comb and can be far more easily opened than the paper cartoons.

After all is ready we must find a customer-we must find someone who desires at the World's Fair may form the subto buy our product. Those who can sell their honey near home are indeed fortunate; but whether you sell near home or far away, don't get frightened and worry about over production. One year with another, good comb honey will bring such a price as will pay for its production in most localities. When you succeed in getting a good crop, supply the home market and all others at a fair price wherever you can. Try and furnish a good article and you will have no trouble in selling to the same parties year after year .- H. W. Scott.

### System in the Anjary.

DITOR AMERICAN FARMER: Give a good apiary a good practice with reasonable ability and there is certainly no one thing more conducive to success than system in its management. The word system naturally carries with it the idea of good system-not one, perhaps, good enough in its place, but absolutely unsuited to certain circumstances. Merely reading A, B, C literature is no system. But that perfection of bee management by which every action sinks into and is properly timed by another, where no effort is wasted, where everything is in its proper place and proper order, and all methods are the nost beneficial, the most oconomical and approved, truly deserves to be termed systematic. Such management may be considered as ideal, and may well be sought by many a beekeeper with profit to himself.—J. W. TEFFT.

### Hummings.

Comb honey sells better and at a higher price than extracted, and therein lies the advantage of feeding back.

W. Z. Hutchinson says that on an average he has secured two pounds of comb honey from the feeding of three pounds of extracted.

Some beekeepers seem to think that it is better to allow the bees to build comb than have them plaster the woodwork of the sections with comb.

Combs near the center of the super are drawn out quicker and finished sooner than those at the outside and corners. This being so, it is best to place the sections least filled at the center.

### CANADIAN APIARIES.

#### The Honey Exhibit of the Province at the World's Fair.

EDITOR AMERICAN FARMER: Apiculture is assuming a prominent position among useful industries. Its development within the past two or three decade in countries rich in the flora which yields nectar has been very rapid. This is not surprising, seeing that honey is not merely a luxury, but is rapidly taking its place as a staple article of food. It is the best of the sweets-the most palatable, the most wholesome, and the one most easily digested.

While the exhibit of honey at the World's Fair is fairly good in quality and moderately ample in quantity, it is not what it ought to be compared with the other agricultural and horticultural exhibits. This is due to two or three chief causes: The first is, that last year, unfortunately, was a rather poor honey season throughout the whole country (the United States and Canada), wit here and there a local exception. In foreign countries it was much the same. And as the exhibits here thus far, up to July 25, are of last year's crop, their comparatively meager character is thus mostly accounted for. The other leading cause to which this is due is the fact that Governments and Legislatures are slow in according to bee culture the position to which it is entitled among productive industries. Hence their failure in many cases to make the necessary appropriations for apicultural exhibits. This is the cause of several of the States of the Union not being represented in the honey

exhibits at Chicago.

The State of New York has the largest exhibit of comb honey at the Fair, while the Province of Ontario, Canada, has by far the largest and, I think, the best exhibit of extracted honey. Ontario's exhibit of comb honey is also, in the opinion of many, the best in quality.

New York has also an exhibit of several colonies of bees busy at work, all of which have been installed and are being maraged by Mr. Hershiser, Ohio has a rather fine display of comb and extracted honey, tastefully arranged by sin, and Minnesota had their exhibits installed among the first. Iowa is installed, and Indiana, Colorado, Michigan, and California are being installed. Illinois is preparing to install. Leaving out Canada, the largest of the foreign home exhibits is that made by the British Beckeepers' Association. Australia, perhaps, comes next. Then there are honey exhibits, more or less, from Greece, Italy, Russia, Brazil, the Argentine Republic, Mexico, Porto Rico, Trinidad, and some other places. These foreign exhibits are principally extracted honey, there being but little comb honey in them. With the exception of a portion of the British Exhibit, I was unable to find among them all any equal in quality and appearance to the Canadian honey, and that from

The first judging or examination of the apiarian exhibits is completed. This season's product will soon be added to that already installed of last season's, and there will be another examination in the Fall, probably September.

The system of examination present, it excludes competition among exhibitors-competition as distinguish ing between good, better, and best among exhibits. There are changes, however, in prospect which may modify that feature. The apiarian appliances ject of my next letter.—ALLEN PRINGLE

### Why Fail in Beekeeping.

EDITOR AMERICAN FARMER: The question is asked why so many fail in beekeeping that begin apparently right. It is well to say apparently, yet when we look the matter squarely in the face there are many who appear to begin right yet do not.

In beginning beekeeping there are too many who begin under the impression that anyone can keep bees and make money out of them. They get the impression that they require no care and attention, and whatever the bees gather is just so much clear gain. Such beekeepers are no permanent success, and their career is but shortlived. Beekeeping has many attractions for the careful beekeeper. There is in a fair locality more than a living to be obtained, but like every other business, the one most skilful and most painstaking is the one who needs fear competition the least. To enter into the business under the impression that neither care nor attention is required means to send the beekeeper to his destruction. It is an unkind act done through ignorance, or worse, to gain some temporary advantage. I say temporary advantage for the one, be he supply dealer or publisher of a bee journal, who would induce anyone to engage in beekeeping under such an inipression is shortsighted and cares not for the permanent and continued success of his husiness.

So many fail, then, because they are not guarded against the pitfalls ahead of them. A good standard work should be carefully read and then some periodical dealing with the subject, either specially or in a department. Then working along, gaining practical experience, in the quickest way by being forearmed with theory, one may quickly become a fairly skilful beekeeper. Bees do not require much attention with the newly invented self-hiver. They require much less than heretofore, but what attention they require they exact or lose results. I saw or rather heard an amusing story related by a prominent beekeeper to a customer, who thought the honey cost said beekeeper little or nothing. After such a remark from the customer the beekeeper said: fruits.

"Oh, no; honey costs us nothing. When the flowers blossom I put out a few thou-sand bottles, neck up, and the bees come and deposit their load in them. As soon as full I cork the bottles and sell the honey." The absurdity of such a story was manifest, and brought to the atten tion of the customer very clearly the work entailed before the honey was secured.-R. F. HOLDERMANN, Brantford, Canada.

#### A USEFUL INSECT.

#### The Great Value of a Little Animal Which Furnishes us With Shellac.

We have no doubt wondered what shellac was and where it came from. It is the product of a composite mass that is found on the young twigs and branches of the butea, croton, and other trees

that grow in the countries of the East. The crude mass from which shellac is obtained is produced by a small insect, Cocars lacca, resembling somewhat the cochineal. This insect is hatched, matures, and dies on these twigs. A number of female insects, with a few males, fasten themselves upon the tender twig and puncture the bark. A tenacious fluid exudes and envelopes them. The insects feed upon this juice, derive their nourishment from it, and deposit their eggs within it.

The males only have wings, and as oon as the females begin to die a few females and the males go to other trees. After the females that remain in this relatinous mass have deposited their eggs, and have died, the eggs hatch out the young insects. The young burrow through the dead bodies of their mothers

to the surface of the mass and cover the neighboring branches. The eggs are deposited close to the bark, so that they are protected by their mothers' bodies and by the mass that has exuded and enveloped the female

insects. Finally, the young twigs are completely covered with a thick, hard, resinous substance. When the females die the frames of their bodies form little cells, like those of a honeycomb. As a result of decomposition, there are the elements of a beautiful purple dye. When these twigs have become sufficiently loaded with this resinous mass, the natives of the countries in which these trees grow strip the trees of these twigs and break them into 'small sticks. These pieces are

called stick-lac. These broken twigs are immersed in hot water, and the hard, resinous substance is kneaded with the hands to press out the purple dye-stuff. After the gelatinous mass has become sufficiently soft it is taken out and dried. It is then put into coarse cloth bags and suspended close to charcoal fires.

Presently the mass begins to melt. By twisting the bags the mass is squeezed out, dropping onto flat sticks placed for that purpose.

As it is dropping from the bags, it hardly strikes the sticks before it is cooled by the air. It forms into thin cakes as it is deposited on these sticks, or narrow, flat boards, and dries. These cakes or sheets are called shel-lac.

As the melted mass is dropping from the cloth bags, small drops unavoidably fall to the ground and dry in little, round bodies, called button-lac. Other and larger pieces, that also fall to the ground and dry, are called plate-lac.

The liquid in which the etick-lac, or small pieces of the twigs covered with the crude mass, was soaked is now filled with the results of decomposition and other matters. It is strained and evaporated until the residue is a purple mass. The residue is thoroughly dried and cut into square cakes about two inches square, which are stamped with certain marks, which indicate the quality of the dye. They are then carefully packed for the market.

The purple dye obtained from this source is used to a great extent. The beautiful scarlet shade in soldiers' cloth is produced by the use of this purple dye. The annual consumption of this lac-dye amounts to 1,200,000 pounds. The lac insect is a native of Siam, Assam, Burmah, Bengal, and Malabar, and the proportion of males to females is one to 5.000.

The best shellac is that which is most completely freed from impurities, and which approaches nearest to a light orangebrown color. If the coloring matter is not all washed out the resin is often very dark; consequently there are different varieties, such as orange, garnet, and

The juices of the trees are somewhat changed by the insects. So if anyone tells you that shellac is "a rosin" he is not correctly informed. Shellac is not the simple juice of the tree, but is the result of the action of the insects upon the juice or rosin. Shellac contains several peculiar rosins.

In olden times common beeswax was

used for sealing envelopes. The wax was mixed with earthly materials to give it consistency. It was difficult to preserve it, however, as even a little heat tended to soften it. Later, gum was used for this purpose, and then came sealing wax, which is made chiefly of shellac. The sealing wax that comes from India is the purest, and is made almost entirely of shellac, vermillion or some other pigment being mixed with it for color. All of the varieties of shellac are translucent, and some of the finer varieties are in sheets as thin as writing paper.

Nectar in flowers is not honey. This nectar is gathered by the tongue of the bee and enters what is called the honevbag, from which it is regurgitated by the bee on its return to the hive and deposited in the honey cell. Even then it is thin and watery, and does not become really honey until the watery parts have evaporated. In collecting the sweets the bees do not confine themselves wholly to flowers. They extract them also from

## THE GARDEN.

#### Pluckings.

The hoe, rake, cultivator, and harrow are great implements for the destruction of weeds. If these are used to stir the soil some good is bound to result.

When shipping potatoes be careful as to how they are packed. Fill the barrels, if such are used, and shake well so that the tubers will lie close together and not be jarred or bruised.

Prevention is always better than a cure, and the weeds in the garden could have been somewhat checked if the stable manure used on them had not been allowed to be a hothouse for the

If commercial fertilizers are used in the garden there is one consolation that there are no weed seeds in them. For this reason alone a good many people use this class of fertilizers.

Ammoniacal carbonate of copper, made by dissolving three ounces of copper and one pound of ammonia carbonate in a half gallon of hot water, is an excellent preventive for celery blight. The mixture is ready for use after adding 50 gallons of water, and should be applied as soon as possible.

#### THE CABBAGE PLANT.

#### Insects Injurious to the Successful Development of the Vegetable.

EDITOR AMERICAN FARMER: Please give me a list of the insects which attack the cab-bage and the remedies for them. I have a patch badly eaten up, and do not know exactly what is causing the damage. Your answer may be of great assistance to me.—M. A. P., Ohio.

The imported cabbage worm-This small, green worm is the young of the white butterfly and feeds upon the leaves.

The zebra caterpillar—Is distinguished by the yellow and black markings upon its body.

The cabbage plusia-Tomato, turnip, cauliflower, lettuce, celery, and various other plants, as well as cabbage, suffer by the attacks of this worm. It is of a pale-green color and feeds upon the

The wavy-striped flea beetle-This insect attacks various other vegetable plants besides the cabbage. It is a small, black beetle, with a yellow, wavy stripe on each wing cover, and feeds upon the leaves, gnawing out little Cabbage aphis—Is a small, greenish

insect and the most destructive enemy of the cabbage, excepting the imported cabbage worm. Spray with kerosene emulsion. The harlequin cabbage bug-The

presence of this pest in a cabbage patch may be known generally by the wilting and withering of the leaves, caused by the bugs piercing the leaves and sucking the sap. They are quite gay in appearance, their bodies being covered with black and yellow blotches.

The first named insect can be de stroyed by spraying with one ounce of pyrethrum, dissolved in six gallons of

water. plusia may be killed with the kerosene emulsion or by a mixture of one ounce of pyrethrum in three gallons of water.

The wavv-strin gotten rid of by spraying with a strong tobacco mixture. Kerosene emulsion is a good remedy

for the aphis, and a few sprayings will make the cabbage uninhabitable for The last named should be fought as soon as his appearance is detected.

Spray with the kerosene emulsion or use

a solution of pyrethrum as strong as for

the zebra caterpillar. A writer says that he has been successful in preventing the attack of the cabbage worm by frequently applying fine wheat middlings when the cabbages are wet with dew or immediately after a

# Shipping Early Potatoes.

storm.

EDITOR AMERICAN FARMER: I have a plan which I find works very well, and which I would advise other potato growers to follow. I know of many farmers who have fallen into the habit of placing the smallest tubers in the center of the barrel and topping the ends with potatoes of a good size.

This has been too often condemned as a great mistake. Another one is what I regard equally as serious, and that is the indiscriminate shipping of all sizes of potatoes in one barrel. This is a system which well becomes the lazy man, but with the industrious man it should be different.

All my potatoes I sort in three classes—large, medium, and small. The large and medium predominate, and in this manner I secure an average price for my potatoes-more than the ordinary. Commission merchants are glad to handle my crops, and say that it comes to them in better condition than those of other shippers.

I not only exercise care in the handling, but also in the shipment of the tubers. I find that ventilation is of some importance, and so cut air holes in the sides of the barrels.-M. A. M. Iowa.

### Celery for Rheumatism.

An English physician announces that he has been able to cure rheumatism entirely by the use of celery in large doses. The bulbs must be cut in pieces, boiled in water until they are soft, when the water is used as a beverage. Milk, with a little flour and nutmeg, is then placed in a saucepan, together with the boiled celery and a few pieces of bread, and allowed to stew for a short time. This mixture can be eaten with potatoes if desired. Rheumatic affections of any kind disappear, according to the statement of this English physician, after a brief diet of this kind.

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PROF. H. S. WILEY, Chemist of the Apricultural Department, has reported to Secretary Morton that since 1888 there has been \$20,723 expended at the Bugar Experiment Station at Sterling, Kan., and \$40,024 at Medicine Lodge since July 1, 1890. The Secretary is eaid to be considering how the annual expenditure in this direction can be reduced. In THE AMERICAN FARMER'S opinion the question is not the amount of money expended, but the results obtained. If we have made any decided step toward the economical production of sorghum sugar, an expenditure of \$60.747 is n mere bagatelle. We should say: "Go on at once and spend a thousand times much, if need be." It cost France many millions of francs to learn how to make sugar from beets, but never was money expended more wisely. It has paid back more than seventy thousand fold. If to-day we could know just how to raise all our own sugar economically the knowledge would be cheap at \$100,-000,000. We should like to have statement as to just how much has been gained by the expenditure of \$60,000 or more in Kansas.

SENATOR WSHBURN says that he will not introduce the Anti-option Bill during the extra session. That has been called by the President for a specific purpose, and no other matters should come before it. The Senator will introduce the bill at an early date in the regular session, and expects that it will pass the Senate with little trouble.

C. A. PILLSBURY, the greatest miller in the world, says that if the farmers will only hold on to their wheat they will realize much better prices for it by-andby. Just what THE AMERICAN FARMER has been saying.

THE AMERICAN FARMER is only 50

#### THE INEVITABLE FIGHT.

next two weeks-possibly a monthwill be absorbed in the fight over the silver question. What the result of this will be cannot be foretold. In all probability, however, it will be a compromise, with strong concessions on both sides. The President's message, calling the extra session, very unfairly laid all the burden of the present hard times upon that thing of compromises and conessions—the so-called Sherman Law. Every fair-minded man knows that this was unjust. The worst that the most radical monometalist can say against the Sherman Law is that it has been inflating the currency to the extent of \$54,000,-000 a year for the past three years, and the illogicalness of the "Antis" is shown by their advocacy of an inflation of the currency by allowing the National banks to issue to the amount of the face value of the bonds they have on deposit; of a repeal of the tax on the issues of State

A month ago it looked as if there would be but little opposition-and that not effective-to the unconditional repeal of the Sherman Law. But the adocates of silver have in the meanwhile gotten themselves together in great shape, and now an unconditional repeal seems impossible. The law will be repealed. and ought to be, but there will be many notable concessions before this is accom-

We said before that President Cleve-

land's attempt to lay the whole burden of our troubles on the Sherman Law was unfair. It is clear that the larger part of the stringency is due to fear of injurious tariff legislation. It is this which has taken all the heart out of many of the important industries of the country-notably the wool business. The value of 50,000,000 sheep, supposed to be worth last year \$150,000,-000, and of 350,000,000 pounds of wool, supposed to be worth last year over \$100,000,000, has been, if not destroyed, at least put so strongly in doubt as to be of little present account to their owners. Here in this single item are wealth and resources to the amount of all the silver in the Treasury put into a great deal worse condition than the silver of the country. At the worst, the silver will sell readily in the market for 72 cents an ounce or thereabouts, which is a small reduction on the price mainscarcely salable at half what it would the toes have grown to an undue any chances of its being palmed off on actly what Congress is going to do with the duties on it. The Eastern manufacturer does not want it at even less price than he can buy foreign wools, for the excellent weason that he does not know what sale there will be for his goods until he finds out whether the accumulated stocks of foreign manufactirers are to be thrown upon this market without let or hindrance.

The tobacco and very many other ousinesses are in the same condition of prostration. There are hundreds of milions of dollars worth of agricultural products in the hands of farmers. and those who have bought directly from them, the values of which have been rendered so uncertain as to paralyze all business. Money is tight because men fear to loan it or expend it on property of such doubtful value.

This cause alone is aggravating the hard times more than any other cause or all combined. There will be no resumption of prosperity until men can know for a certainty what their property is worth. This they will not know until Congress makes an authoritative declaration as to what it proposes to do with reference to the duties on agri-

The fight that will begin in Congress immediately after the settlement of the silver question will be upon tariff. In this will lie imminent danger to the farmers' interests, because the whole struggle will be to make as much show as possible toward tariff reform by sacrificing agricultural products to save manu- lime. factured ones. The manufacturers are going to fight hard to save themselves from foreign competition, and they will have powerful help from the labor organizations, representing the hundreds of work by the stoppage of the factories. The influences brought to bear upon

by sacrificing him. This is the situation to which the farm-

ers must wake at once. Too long have they listened complacently to rhetoric Congress is now in session, and for the on the greatness of husbandry and the virtues of farmers by men who fed them this flattery while manuvering for sub-

> stantial advantages for other interests. Let a halt be called in this windy elo quence and real work in the interests of farmers be substituted. We can get along without compliments if we have real work done in our behalf. The farmers themselves must be as keenly alive to their interests and to the wrongfulness of legislation which menaces those interests as the manufacturers and the labor unions are. They must be no less determined in insisting upon an equal measure of protection. The farmers' wool, hay, tobacco, eggs, fruit, barley, rice, etc., are of just as much consequence to him, just as much deserving of Governmental protection, as the miners' silver, the workingman's labor, and the manufacturers' goods. The other classes combine to fight for their classes' interests, and the farmers must solidify themselves into a class for the same purpose. The other classes fight selfishly and persistenly—the farmers must do

It is for this purpose that THE AMERI-AN FARMER is established in Washington. It is here to watch the manuvers of those who would sacrifice the farmers' interests to their own, and to frustrate them whenever it can. The farmers have suffered much from the lack of such a representative organ at the National Capital. They need a faithful, vigilant, incorruptible champion of their ights constantly on guard, and such THE AMERICAN FARMER is. They hould all take it during the coming ear, as one of the best ways in which o aid in the great fight it is making in their interest, for the more subscribers t has the more effectively it can do battle for them. Let every man who believes in protecting the farmers to the ame extent that other Americans are rotected take the paper himself and see that his neighbors do the same Nothing will do more to help the cause of the farmers than to give a liberal support to their champion at the seat of

### CONTAGIOUS FOOT ROT.

We have received several inquiries as person doing this should be furnished with a pair of sharp toe nippers and two sharp knives, the latter to pare away portions of the hoof that may be overgrown and curled under. All horn that is separated from the foot by dis ease should be removed, and the exposed part cleansed with warm water after which it should be dressed with eaustic or astringent agents.

There are a number of substance which are used in the treatment of this disease, the most popular being bluestone (sulphate of copper) mixed with an equal portion of lard. Finely-powdered blue stone may also be applied to the ulcers with good effect. Others use butter of antimony, and still others the diluted mineral acids. Our advice would be to rely upon the sulphate of copper. Twenty-four hours after this agent is applied, if the ulcer is still foul and has a disagreeable discharge from it, a second application should be made. After this, the treatment consists in keeping the feet as clean as possible, and in the daily application of some antiseptic liquid, which may be a solution of sulphate of copper dissolved in 12 times its weight of water. When a large number of sheep are affected, this latter treatment may be performed by driving the whole flock through a wooden trough which is filled to the depth of three or four inches with the medicinal liquid. Sometimes benefit is obtained by driving the flock through such a trough which is partly filled with freshly slacked

The careful examination of every animal and the paring of the feet is essential to success. When the disease is first noticed, the well sheep should be separated from the diseased ones, their thousands of operatives thrown out of feet should be treated with a weak sulphate of copper solution, and then they should be placed upon ground where Congress to save the factories will be no affected sheep have been. If this enormous, and they will all be more or portion of the flock is carefully watched, less inimical to the farmer, because they and animals removed as soon as they will selfishly strive to save themselves show lameness, a considerable portion of the flock may be prevented from taking

### WHAT WE BELIEVE.

THE AMERICAN FARMER firmly believes that we should raise on our soil everything that our people need and which our climate and soil are capable of producing.

We believe that to may out money for hese to foreign producers is an economic wrong; that it sends abroad money which should be kept at home: that it gives employment and profits to foreigners which our own people should enjoy, and that it leads to the impoverishment of the country.

We believe that it is the high duty of the Government to encourage our own agricultural producers by every means possible by shutting out foreign competition in every article which comes into injurious rivalry with those raised on our

Particularly we believe that every bound of wool, tobacco, hay, rice, cotton, butter, cheese, hops and sugar, every bushel of barley, and ever dozen of eggs needed in this country should be raised by American farmers on American soil, and the purchase money for them be paid in American dollars to American citizens, and we are inflexibly opposed to any changes in our tariff laws which will admit competing foreign products on more favorable terms. We are, on the contrary, in favor of still more stringent laws to more certainly shut these

We propose to fight for this belief with all the energy we possess, and we invite all those who believe that our farmers should be making more money, instead of less than now, to rally around our standard

We are in the fight for protection to merican farmers to stay, and we shall ver cease from our advocacy of this principle as long as a dollar goes abroad for farm products which should be spent

LET the advocates of eleomargarine say what they will, no one will eat the stuff when they can get genuine butter. This has been proved in Connecticut, where a law similar to that in Massachusetts has been passed, forbidding the selling of oleomargarine, or any other substitute, for butter, in the color, form. or name of natural yellow butter. Wherever dealers were compelled to to the treatment of contagious foot not put up the sign "Oleomargarine sold in sheep. When a flock is found to be here" they gave up the business enaffected, each animal should be caught tirely. Their customers did not want and the feet carefully examined. Where oleomargarine, and didn't want to take

> GREATER independence in stock breedis observable in this country now than formerly. Persistent attempts were made to reproduce types of animals that ere imported from across the seas and om remote sections of this country. Thousands and thousands of dollars were unually paid for males to keep up the ever varying types—the standards of other regions. By slow degrees it was learned that nature and natural laws combatted skill and imported standards. and then it was discovered that individual farms should have individual types. This was an advance.

THE French are much wiser than we many things. They have never allowed the railroads to purchase of othervise break down competing canals, but these are kept up to their best capacity and constantly improved. More than \$300,000,000 has been spent by the Government since the beginning of the resent century in enlarging and improving the canals and rivers, and about two-thirds of this amount has been spent by the present Republic.

STILL no appointment of an Assistant Secretary of Agriculture. It seems onceded that the appointment ought to go to the South, but in the opinion of the President and Secretary the right man is tardy in showing up.

### PERSONAL.

Mr. Wm. George Hill, the Chief of the Division of Records and Editing of the Agri-cultural Department has been ill for several

J. W. Miller, Warrenton, Va., sowed head of oats and raised a quart of grain; he sewed the quart and raised 20 bushels; and finally sewed the 20 bushels and thrashed

Mr. Fred C Smith, the leading horticultaral agitator of South Australia, is in the States, as a representative of the South Australian Government, to make a six veeks' examination of the fruit indus He is very highly elated with what he has

The Brockville (Ontario) Recorder speaks ery complimentary of the appointment of Mrs. E. M. Jones, of that place, as one of e jurors on butter for the Dairy Exhibit the World's Fair. The number of jurors alloted to Canada was small, while there were many persons whose dairy knowledge en-titled them to consideration in making the

## U. S. DEPARTMENT OF AGRICULTURE WEATHER BUREAU.

Departures from Normal Rainfall for the two Weeks Ending Aug. 7, 1893.



During the two weeks ending Aug. 7, 1893, warmer than usual over the Lake vestward to Idaho. The daily average excess the greater portion of the region named, the exceptions being the Lower Ohio Valley where it amounted to 3°, and in Montan being the Lower Ohio Valley, western portion of the Dakotas where the excess ranged from 3° to 5°. nterior of central California. In the States ordering on the Atlantic and Western Gulf Coasts normal temperature prevailed; while it was cooler than usual over the southwestern portion of the country, including Oklahoma, southern Colorado, New Mexico, and Arizona, where the deficiency in temperature anged from 2° to 5°, being greatest in south

ern New Mexico, and adjacent parts of Texas.

BAINFALL. The rainfall for the period named exceeded New England, and generally There was also more than the usual Mexico, Arizona, southern Colorado, and por-Nebraska, Iowa, Missouri, and e ern Kansas. Heavy rains occurred from southern Virginia southward over the Carolinas, and also in northern Florida and southrn Alabama, where the actual fall at many tations for the two weeks ranged from three Carolina coast. The most noteworthy feature of the rainfall of this period is the compara tively large amount that has fallen over the portion of Texas, New Mexico, and he average fall occurred. Much less than he average amount of rain has fallen over northern, central, and western portions roducing States, where drouth conditions are prevailing to a greater or less extent. Little or no rain has fallen over portions of northern Illinois, and practically fallen in some portions of Michigan, northern onsin, and central Minnesota

New England,—Rainfell New York .- Hot and dry; much complaint of

New Jersey.—Heavy rains in southern section have greatly improved all crops; in peach growing districts where outlook has been so promising present indications are that unless heavy rains come soon the yield will be deficient in size and quality; great deficiency of rainfull in central and northern sections where crops are seriously affected and shortened.

ylvania.—In most places drouth remains en; all crops will be shortened, especially n portions of southeastern Counties.

Maryland.—Rain much needed, except in
outhern portions; corn below average in most
ections; tobacco, potatoes, grass, clover, and
matures backward; tomatoes improved; out narvest begun in west portion; fruit promising; some heavy shipments of peaches; fallowing

more complimentary. She is widely known as

her book, "Dairying for Profit; or, The Poor

Man's Cow." is a text book of the science.

She has a fine herd of Jerseys, which are

Dakota, where she is known as the

cattle, of which she has entire charge. does not simply take the cattle to the range

and leave them there, but remains

Gertrude Petan, 18 years old, lives in South

Her father owns 300 head of

and takes care of them as well as

could any cowboy. Her duties frequently take her from 30 to 40 miles from home, as

the cattle must be kept moving in order to

feed well. She wears a wide-brimmed white

felt hat, long gantlet gloves, carries a lariat

coiled about the horn of her saddle, is pro-

Samuel Minturn Peck, the poet, finds an

unexpected way to turn his genius into gold,

good as gold. He is running a farm in Alaleast into paper dollars, which are as

He makes a specialty of turkeys. Nor does

this necessarily mean that he is getting rich.

But he has more orders for turkeys than he

can fill, and so he is able to name his own

Turkey Tail Fan" has given him fame, and

ladies all over the country are writing him

STILL THEY COME.

J. B., Pike's Peak, Md.: I received your

paper and watch some time ago. I am well pleased with the watch. It is a good time

R. I. N., Troy, N. Y.: The watch you sent

me last runs to a charm. More than pleased with it. Think the paper a good one for the

E. P. H., Roscommon, Mich.: I received the watch in good time and have given it a

clock, and I am well satisfied for the little

trouble I went to in getting the subscriber

Abe M., Wilmot, Ind .: I received the

Having waited a sufficient period after re-

ceiving the watch to test it, I can truly say

it is a marvel of cheapness, a good timepiece, and more than could be expected for the

fair trial. It proves to keep time with

have. Both

paper and watch you sent me in

cheap to do without.

for your paper.

that he is making money, by a long

terials for similiar fans, and

This fact does not necessarily imply

His poem on "My Grandmother's

demand for him to supply the ma-

sentimental

watch and paper too

vided with branding irons, and rides

wildest bronco on the range.

known all over Canada.

leader in the art of practical dairying, and

Vifginia.—Sunshine generally below normal; rainfall ranged from quarter inch to five inches, being lightest in southern portion of the Valley and heaviest from Nottoway to Petersbug; all orops generally much improved, but rain yet needed in northeast.

North Carolina.—Much needed rains fell everywhere during the week, breaking the drouth in this State; rain came too late for early corn, but will mature late crops; prospects greatly improved and outlook more encouraging than for some weeks.

ome weeks.
South Carolina.—Crops greatly improved

Florida.—Temperature slightly deficient; rain-

amage done yet.

Tennessee.—Crops greatly improved in middle Tennessee.—Crops greatly improved in middle and eastern divisions by recent rains: farmers plowing for Fall seeding; the drouth continues over the western division, where everyting his suffering; cotton is damaged by rust; pastures failing; stock water scarce; tobacco light.—Kentucky.—Temperature normal and sunshine excessive; very little rain; corn and tobacco agriously damaged by drouth in central Counties; in other sections crops look well; pastures burging up; grapes potting bully; ally

-Rainfall below and temperature and minos.—Burnall below and temperature and sunshine above average; continued drouth scriously damaging corn and potatoes; pastures drying up; some farmers feeding stock; owing to hard ground, plowing for Fail seeding pro-gressing slowly; stock water scarce; rain badly needed.

Indiana.—Temperature and sunshine above formal; local slowers an southern portion; routh continues unbroken elsewhere; orn rop will be short everywhere, and an entire aflure in many sections; potatoes in bad condition; pastures ruined; farmers feeding cattle; 'full plowing delayed.

West V-rginia.—Rainfall and temperature be-

COMPLIMENTS.

quantities of turnips being sown, with abundant general this week.

Georgia — Excellent week, with abundant showers; cotton and bottom corn much improved; peas and potatoes doing well; turnips being sown; cotton picking is beginning in southern districts; cane and rice in promising

condition.

Florida.—Temperature slightly deficient; rainfall excessive and badly distributed; thunderstorms daily; conditions generally favorable for crops; cotton picking progressing favorably; grapes and guavas ripening; peaches, pears, and melons nearly gone.

Alabama.—Copious mins, too much for cotton, causing rust, shedding, increase of boll worm and caterpillar; picking to commence in somicoal ties in a few days; early corn being housed; late corn doing well, also potatoes, peas, and sugar cane; fodder pulling and hay making suspended temporarily.

Mississippi.—Temperature normal; sunshine sufficient; showers unevenly distributed; general outlook improved; cotton shedding and rotting in some sections; hay and fodder being saved; slight increase in damage from worms.

Louisiana.—Normal temperature and sunshine; general ruins very beneficial; cotton doing well, except in northeastern parishes where worms are very bad; picking to begin shortly; in many localities; corn injured to some extent by bud worms, but generally good; rice cutting to begin shortly; potatoes and cane doing well.

Texas.—General showers during the week have loing well.

Texas.—General showers during the week have

ures burning up; grapes very suffering for rain.

Missouri —Seasonable temperature and sunshine; drouth conditions prevail, except in a few scattered localities; nothing but late corn being seriously affected; seasonable work

low.

Michigan. — Rainfall below, temperature
bout and sunshine above normal; lack of

Michigan.—Rainfall below, temperature about, and sunshine above normal; lack of rainfall during the past week has had an appreciable effect on crop growth; pastures, meadows, and clover considerably damaged; corn and potatoes in fair condition; grass-hoppers injuring vegetation.

Wisconsin.—Spring grains mostly out; Spring wheat, oats, and barley light crops; drouth seriously affecting potatoes and pastures, and to some extent corn.

Minnesoda.—Slight excess in temperature, with scarcely any rain; drouth damaging all growing crops; harvest progressing; some barley and wheat thrushed, yield better than expected.

Iowa.—Warm and dry; corn seriously threaten-

some barley and wheat thrashed, yield better than expected.

Iowa.—Warm and dry; corn seriously threaten-ed by drouth but holds its own well: thrashers report oats and Spring wheat light; Winter wheat bet er.

North Dakota.—Very high temperature, hot

North Dakota.—Very high temperature, hot winds and no rain were very injurious to all grain and vegetables; burley, onts, and rve harvest general and wheat cutting commenced; quality of latter averaging poor.

South Dakota.—Wheat and out harvest progressing under favorable conditions; wheat berry better quality than expected; corn, flax, potatoes, grass, and late grain need rain; rain below and temperature and sunshine above average.

Nebraska.—Week very favorable for harvest-

the State no rain fell, and corn generally needs rain badly.

Kansas.—Rainfall ample in northwest and southeast, elsewhere light; temperature and southeast, elsewhere light; temperature and sunshine about average; conditions unfavorable in southern and central Counties, elsewhere lavorable; corn and feed erops much improved, except in unfavorable districts where they are injured by drouth.

Oklahma.—Temperature slightly below normal; drouth still continues, except in the where they are the stern Counties where abundant rains have fallen; elsewhere too dry to ploy, and every fallen; elsewhere too dry to ploy, and every fallen; elsewhere too dry to ploy, and every

western Counties where abundant rains have fallen; elsewhere too dry to plow, and everything suffering for moisture.

Montana.—Temperature above and precipitation below normal; ground very dry; hay errop being harv sted, average yield for timothy, but wild grass below average.

Wimming.—Temperature normal; precipitation below normal; watersupply becoming very low, and all kinds of vegetation suffering; discouraging outlook.

ouraging outlook.

Idaho.—Farmers busy harvesting wheat, barroam.—Farmers only harvesting wheat, bar-ey, and hay; oats ripening; late-sown Spring wheat light, early sown fair, but thin; potatoes heed rain; gardens doing fairly well; grasshop-pers damaging crops in northwest Counties. Colorado.—Marked improvement in all vegita-ion from late rains, especially over southern Counties; wheat harvest continues in localities; (ruit, ripening favorably in western postfore

in most sections; temperature slightly below; weather generally cloudy, but favorable to all vegetable growth; ranges in fine condition and stock fattening rapidly; all reports are unusually satisfactory.

Utah — Temperature of the week normal; scattering showers; a good week for late crops; harvest under way; considerable fruit now in market.

market.

Washington.—A week of hot, sunny weather, with timely showers, very beneficial to all crops; haying almost finished in several Counties; grain and fruit have done splendidly. out well: Spring grain will be short; second crop of alfalfa cut; hops doing finely; fruits ripening; grass on ranges drying up. California.—Warm weather ripening fruit a little too rapidly to be handled properly; hops and grapes still give good promise of large vields.

MARK W. HARRINGTON, Chief of Weather Bureau

### The paper is a No. 1 and should be in

I have received your paper and am ever nuch pleased with it, in proof of which I nclose my subscription.—BEN. F. OWENS, inclose Vermont, Ill.

THE AMERICAN FARMER is deserving of the fullest measure of success, as it is not only original but practical.—OLIVER D. SCHOCK, Harrisburg, Pa.

The paper is a dandy. If it could be made weekly I would like it ever so much better. fills a long felt want to agriculturists, and all farmers should take it.-John Brooks,

### NEW PUBLICATIONS.

Brown County, Md.

SHEEP FARMING; A TREATISE ON SHEEP, THEIR MANAGEMENT, AND DISEASES. By W Sutherland. Published by William By W Sutherland. Published by William Cooper & Nephews, Berkhamstead, England Price, one shilling. This is a book which should be in the

hands of every farmer who owns sheep. Its price is so low that it is within the reach of all, and contains nearly 200 pages of reading trations. It treats of the care and attention ecessary to a flock. The different diseases with their symptoms and cure, is fully various appliances which are of benefit to the flockowner.

THE HAMPSHIRE DOWN FLOCK BOOK VOL. IV. Published by the I Down Sheep Breeders' Association, Rawlence, Secretary, 49 Canal, England. Price, 10s 6d.

This is the association's flock book for the resent year and makes a volume of 155 pages, printed in large type on heavy calendered paper. It records rams from 661 to 1,014, besides giving other things of interest to the breeders of this variety of sheep. The fact of the large number of rams recorded in the volume evidences the success which is attending the association. book contains the record of flocks registered in Vols. I, II, and III dispersed or transferred prior to the issuance of the present volume, nd also a list of flocks registered since the last volume was issued.

BBERHART'S ECONOMIC ENTOMOLOGY By Noble M. Eberhart, Ph. D., Sc. D., F. S. Sc Published by A. Flanagan, Chicago. Price

This is a revised edition of the author's pre vious work. The first edition met with so much favor that a second has been prepared, which has been considerably improved. The great object of this work is to instruct young cople, farmers, and others an interest in in-

sects, their homes and habits, and to advance some plans and means for combating them. So many thousands of dollars are annually lost through ravages of injurious insects that it seems imperative that methods of prevention should be studied by all. This is intended as a text in school work, and also as a guide for gardeners, farmers, and others. WENSLEY DALE FLOCK BOOK, VOL. IV

Published by the Wensley Dale Long Wool Sheep Breeders' Association and Flock Book Society, T. J. Other, Secretary, Howgrave, Ripon, England. The association has a membership of nearly

50, and from the flock book in question if would seem as though things are in a very flourishing state. In this country the Wens ley Dale long wooled sheep are very few in numbers. They were bred in the United from what was called the old Kingdom Teeswater breed, and to-day are the biggest of the British long wooled sheep. Seventy-nine rams were registered last year, the number so far recorded being 384. Notes.

The Phrenological Journal for August. This is "An Illustrated Journal of Human Published at 27 East 21st street New York. Price, 15 cents.

The Overland Monthly for August is full of highly interesting reading matter, illustrated by very artistic engravings. There are stories, sketches of travel, descriptions of great industries, and chat and gossip about smalle Published at San Francisco, Cal Price, 25 cents.

We have received the premium list for the fourth annual fair of the Tarentum Agricultural and Driving Park Association, which will be held at Tarentom, Pa., Aug. 29, 30, 31, and Sept. 1. A good amount of premiums are given out. For further information apply to the Secretary, J. L. Moore, at Tarentum

Worthington's Magazine for August contains: Random Notes on Hawaiian Life (illustrated); The Summer Cloud; First Love Wild Sunflower: In Ole Virginay 50 Years Ago; Mental Characteristics of An August Eve; "Flaxydono-Japanese; An August Japanese; An Army beans," Reminiscences of an Army Behind My Vines; By the Sad Sea Waves; Departments. Published at Hartford, Conn

Mrs. F. A. Steel, like Mr. Kipling, has gained distinction by her fresh and fore pictures of life in India. She knows the life of the native women and children as well as more obvious phases of Indian existence, and her forthcoming book, "From the Five Rivers," is described as a remarkable work in its mingling of fresh humor and true pathos It will be published immediately in Apple ton's Town and Country Library.

### Receial Correspondence THE AMERICAN FARMER. EXPORT HAY TRADE.

### A Review of Prices and Conditions in the New York Market.

BY BYRON ANDREWS.

NEW YORK, Aug. 13, 1893. The searcity of forage in Europe and consequent revival of hay exports has attracted great attention throughout the country.

The unusual activity in this line of commerce has led to a movement in New York City for the establishment of a to that adopted in the handling of track grain and flour at this market.

The hav trade in this city has been conducted in rather a desultory manner in the past, which gave rise to unsatisfactory friction between buyer and seller without a remedy for an authoritative adjustment of differences. Hay received here was often more or less damaged, of different grade than what was expected by the consignee, and not infreuently short weight.

As most of the transactions made between the parties whose only knowledge of each other was through correspondence, the difficulties attending upon dealing in the product has been a source of increasing annoyance, and would naturally grow no less in case of an enlarged volume of business should the expectation of large exports be realized.

Some years ago a hay exchange was organized in this city, but owing to differences between local dealers it did not thrive. Recently, the subject being agitated again, the appointment of a committee by the New York Produce Exchange led to a consultation with members of the local trade, and led to the adoption of the following system of grades at a meeting held on the 9th of this month.

The following are the grades which are important to farmers for a proper understanding in the future of quotations of prices in the published market reports from this city:

Prime timothy hay shall be pure timothy properly cured, bright natural color, sound

No. I hay shall be timothy, not more than one-quarter (1) mixed with other tame grasses properly cured, bright color, sweet, sound No. 2 hay shall include all timothy not

good enough for No. 1, proportionately mixed with other tame grasses, sweet, sound, and

No. 3 hay shall include all hay not good enough for other grades not over one-third (\frac{1}{2}) clover, but may be natural meadow free from wild or bog, sweet, sound, and well baled. taining not over two-thirds (\*) clover and one-third (1) timothy properly cured, sweet, sound, and well-baled.

Clover hay shall be medium grown, prop erly cured, good color, sweet, sound, and well

No grade or rejected hay shall include all hav badly cured, musty, stained, or in any y unsound. No. 1 rye straw shall be clean, bright, long

rye straw pressed in bundles, sound, well and securely baled. No. 2 rye straw shall be clean, long, rye straw, sound, well and securely baled.

Out straw shall be clean, bright out straw, sound, well and securely baled. In order to carry out the object of the grades. new movement, Mr. J. Y. Roberts has

been appointed inspector.

The method to be adopted for inspection is an improvement on that in vogue in Chicago. At the latter place the inspection is made on the cars: here it is to be done after the bay is unloaded. when it is not only to be examined as to quality, but also weighed. A certificate of the grade and weight of each lot will be issued in duplicate, one for the consignor and one for the consignee. A fee will be charged of \$1 per car for inspection on car lots, and 10 cents per ton on lots arriving otherwise. The charge for weighing will be 20 cents per ton. These charges are divided between buyer and seller.

This will insure the consignor absolute protection from loss through error in either grading or weighing after reaching the market, and also protect the consignee from embarrassment from the receipt of hav which falls short of the expectation of the consignor.

This being the chief point of export in the United States, your correspondent has taken pains to gather particular information relative to the conditions of trade and ruling prices. As remarked to-day by one of the leading commission men in this city who has been connected with the trade for 28 years, the recent flurry concerning export is a repetition of an effort which has been made peridically during this period to inaugurate a commerce with Europe in torage products. Heretofore these efforts have not resulted to any lasting advantage, nor has the export trade reached large proportions, in fact; we have usually imported a great deal more than we sent abroad. Within the last two months, however, in response to European demands, the amount shipped has been increased very largely. There are indi-cations, however, that the prices have reached a climax and that the monthly shipments will not continue to increase owing to causes which will be explained

The fact is that the Canadians seem likely to furnish the bulk of what will be needed in Europe from this side of the water from this time forward, owing to the law which permits exports to be made from lower Canada through New York City, without the payment of duty by shipment in bond. There is a four dollar duty on Canadian hav, but a very large crop is reported from the Province of Ontario, and dealers in Toronto and other points in Canada are offering it to New York commission men in great quantities at from \$2 to \$3 less per ton than farmers of the United States are willing to take. As the commission men either buy the Canadian product in bond for export or simply receive it as for-

warding agents, the duty upon it is evaded, and the farmers of Ontario enjoy the advantage of our facilities in free competition with our own producers.

Another reason for the opinion that prices based on export demand have reached a climax is well expressed in a letter received to-day by a member of a New York Produce Exchange from his London correspondent, who says: "The drouth in the early Summer in England has been followed by abundant rains, which promise a considerable crop from second growth. Again, hay has begun to come forward in large quantities from Russia, and is selling at a price equivalent to \$23 to \$26 per ton. This hay sells more readily than the American, because in quality and kind it is similar to the native English meadow hay. system of grading and inspection similar Taking into account ocean freights and landing charges, American hay at \$16 to \$17 per ton in New York cannot be handled with profit in this market."

Another gentleman engaged in the trade had information from London that liberal consignments of hay from the Argentine Republic are on the way to the English market.

Inquiry as to freight rates elicited the fact that the charges for carrying baled hay across the Atlantic are about \$10 per ton of 2,240 pounds, with an additional primage of five per cent.

It must be remembered in this connection that the prices quoted in London are for the long ton, 240 pounds more than the American ton,

It is admitted, however, that the demand from continental Europe will be unusually large, so that in spite of ex-orbitant freights a considerable export may be expected from the United States, unless our farmers hold their crops at so high a price that the Ca-

nadian will get possession of the market.

A New York dealer told your correspondent to-day that he would advise the farmers of this country to sell their crops as rapidly as possible, and not take the chance of being forstalled completely by Russians, Argentines, and Canadians. He thought the present price was as good as will be realized. and in addition with this the producer would save the loss from shrinkage in weight, which is considerable upon hay kept for some months.

There is a great difference in character of hay required for different foreign markets. The French will take nothing but clear timothy unmixed with any other grasses, while the Engish buy timothy and clover mixed.

There is considerable export business from this point also for the West Indies. where hay of various grades are sent.

In former times all the southeast coast of the United States, from Washington to New Orleans and Galveston, was supplied by sea from this market. New York has lost the great bulk of this trade, however, which is now supplied from Chicago and St. Louis, and to some extent from timothy grown on the uplands of Alabama.

The hay required for local consumption in this market is of various grades, but chiefly of pure timothy and the better grades of mixed timothy and clover. Native wild hay is not in demand.

Prices here at this time range from \$21 to \$22 per ton for fancy down to \$16 to \$17 for lower and intermediate

of consignment by country dealers to commission men, who advance the freight and charge \$1 per ton additional for the plan by the State." handling and insurance. There about 150 dealers in New York, of whom 35 are in the commission business, who receive consignments from the country and sell to the local trade or to exporters.

It costs at present railroad freight rates from the Middle States to this city about \$3.50 per ton or \$4.50, adding commission for charges to this point. This added to the ocean rate brings up the total of charges from the interior to London to about \$17 for a long ton, although the hav is actually sold to the exporter at this point, and the interior dealer or producer has nothing to do with the subsequent charges, the effect upon the price is the same, the exporter must take everything into account in comparison with price paid in the market to which he is

consumer is paying rather more for his hav to-day than it will bring in London, taking into account the charge for ocean freight.

It is always unsafe to make predictions, but the conclusion drawn at this time from a consensus of opinion of those engaged in the trade and the chief export market in the country, is to the effect that the best time for farmers to sell so much of their hay crop as they expect to dispose of will be as soon as it is gathered and fit to bale.

### Government Publications.

The Treasury Department of the United Bureau of Statistics, is sending out both "Wool and Manufactures of Wool," by Col. Switzler, the former Statistician to the United States Treasury, and "The Wool Book," com-piled for the National Association of Wool Manufacturers, by S. N. D. North, Secre-

wool statistics" in convenient form of 122 pages, that can be carried in the pocket. It gives the number of sheep and their value; the number of pounds of wool produced and its value from every country of the world, and for a great number of years, together with a vast deal of accurate information that is not

and anywhere else in one book.

Bulletin readers should apply for the Government aids at once, and carefully in form themselves on the wool question both o this country and of the whole world. Addres Hon. S. G. Brock, Chief Bureau of Statistics Treasury Department, Washington, D. C.

### De You Have Asthma?

If you do, you will be glad to hear that the cola plant, found on the Congo river, West Africa, is reported a positive cure for the disease. The Kola Importing Co., 1164 Broadway, New Lork, have such faith in this new discovery, that they are sending out free by mail, large trial cases of Kola Compound to all sufferers from Asthma, who send their name and address on a postal card. Write to

### FARMERS IN CONGRESS.

## Tillers of the Soil Who Will Serve in the Fifty Third Body

Michigan has four farmer Representatives. James S. Gorman, of the Second District, was born on a farm in Washtenaw County, Mich., Dec. 28, 1850, upon which he now resides. He became a lawyer and was actively engaged in the practice of his business when on account of the ill health of his father he retired to his farm where he has since heave on. tired to his farm, where he has since been engaged as a practical, everyday farmer. He was elected on the Democratic ticket, receiving 22,007 votes to his Republican opponent's 21,443. His district comprises Jackson, Lenawee, Monroe, Washtenaw, and a part of Wayne Countries. Wayne Counties.

George F. Richardson, of the Fifth District,

composed of the Counties of Ionia, Kent, an Ottawa, is the son of a pioneer farmer, and received a common school education. He was born in Jamestown, Mich., July 1, 1850, and held several minor offices. He was elected on the Democratic and Populist ticket, receiving 20,095 votes to his principal opponent's 20,085, who was a Republican, and 1,860 for

the Prohibitionist candidate.

John W. Moon, of the Ninth District, was born in Wayne County, Mich., Jan. 18, 1836. He says that until 18 years of age he worked on his father's farm, attending school during the Winter. He removed to the northern part of the State in 1854 and connected himself part of the State in 1854 and connected nimes in with the lumber business, which he has been following ever since. His district is formed of Benzie, Lake, Leelanaw, Maistee, Manitou, Mason, Muskegon, Newaygo, Oceana, and Wexford Counties, and he was elected on the Republican ticket. He received 13,969 votes to the Democratic candidate's 13,053; Prohibitionists, 1,673, and

Thomas A. E. Weadock, of the Tenth District, is the son of an Irish farmer, and left the farm to take up the printing business. He was born in Ireland Jan.1, 1850. He is a Democrat and received 14,858 votes. district is formed from 15 Counties

MINNESOTA. William D. Washburn, United States Senator, was reared on a farm and worked there until he was 20 years of age. He was born in Livermore, Me., Jan. 14, 1831. He entered college, graduated, took up the study of law, and was admitted to practice. He was appointed Surveyor-General of Minne-sota by President Lincoln in 1861, and has ever since resided in that State, making Minneapolis his home. He was a Representative in the 46th, 47th, and 48th Congresses, and was elected Senator in 1889. term of service will not expire until March 3, 1895.

James A. Tawney, of the First District, was the son of a farmer and a blacksmith, and learned the trade of the latter, at which he worked for many years. He was born near Gettysburg, Pa., Jan. 3, 1855, and finally becertysburg, Pa., Jan. 3, 1855, and manay became a lawyer. He was elected as a Republican, receiving 18,141 votes, against 15,000 for his adversary, who was a Democrat. His district is composed of 10 Counties.

Haldor E. Boen, of the Seventh District, which is composed of 16 Counties, was born in Norway, and in company with two younger brothers emigrated to Minnesota in 1868, ettling in Otter Tail County in 1871. In his biography he says that he settled on his present farm of 322 acres in the township of Aurdal in 1872, and during the next six years worked on this farm in Summer and taught school in Winter. "May 19, 1884, I years worked on this farm in Summer and taught school in Winter. "May 19, 1884, I assisted in organizing the Otter Tail County Furmers' Alliance and was made its Secre-tary, which position I held for seven years, resigning after having been elected the eighth time. During the years 1886-'87 I was Corsponding Secretary for the Minnesota State farmers' Alliance, and in 1888-'89 was its Vice-President, being each time elected without a dissenting vote. In 1889, in a meeting of the Executive Committee of the State Alliance, I offered a resolution requesting the Legislature, then in session, to provide for manufacturing binding twine in the peni-The business is conducted by a system | tentiary at Stillwater, which was adopted, as a committee, was appointed to lay the People's Party ticket, receiving 12,614 votes, against 12,529 for the Republican can-7,096 for the Democratic, and 2,586 Republican candidate. for the Prohibitionist.

### MISSOURI.

Uriel Sebree Hall, who represents the Second District, composed of Carroll, Chariton, Grundy, Linn, Livingston, Monroe, Randolph, and Sullivan Counties, was born on a farm in Randolph County, Mo., April 12, 1852. He received a good education, a lawyer, but gave up his profession to engage in farming. In his biography he says that he "was State Lecturer of the Alliance, and afterward State President of the Order. I rejused to indorse any of the resies of the Alliance, but fought them with all the power at my command. was elected as a Democrat, receiving 21,928 votes, against 16,626 for the Kepublican and for the Populist candidate

David A. DeArmond, of the Sixth Dis-trict, was born in Blair County, Pa., March 8, 1844, and was brought up on a farm. He Democrat and was elected to the 52d 15.545 votes to his Republican adversary 13,151. His district is composed of Bates, Cass, Cedar, Dade, Henry, Johnson, and St. Champ Clark, who is the Representative of

the Ninth District, has filled a number of positions. He was born near Lawrenceville. Ky., March 7, 1850, and received a good education. He says that he has worked as a hired farm hand, clerked in a country store, edited a country newspaper, and practiced law continuously since 1876. He was elected to the 53d Congress on the Democratic ticket, receiving 17,534 votes, the other result standing as follows: Republican candidato, 14,944; Populist, 579. His district comprises Andrain, Crawford, Gasconade, Lin-coln, Montgomery, Pike, Ralls, St. Charles, and Warren Counties.

#### MONTANA. Thomas C. Powers, United States Senator,

was born on a farm near Dubuque, Iowa He is interested in cattle, mines, and various percantile pursuits, and at present is located a Helena. He was elected to the Senate in 1890, and his term will not expire until 1895. NEBRASKA.

George D. Meiklejohn, who represents the Third District, was brought up on a farm, being born at Weyauwega, Wis., Aug. 26, 1857. He is a lawyer by profession, and has held many public offices He was elected to the 53d Congress as a Republican, receiving 13,635 votes, against 10,630 for the Democratic nominee and 9,636 for the Independent candi-date. His district is composed of 18 Coun-

Eugene J. Hainer, of the Fourth District, representing 11 Counties, was born in Hungary Aug. 16, 1851, and came to the United States three years later with his parents. His early boyhood was spent on his father's farm, and at the age of 15 he left home, workng as a farm hand near Garden Grove, Iowa, ntil 1873. He received the greater part of his education at the Iowa Agricultural Colege, teaching school during vacations to pay expenses. He became a lawyer, and is no interested in a line of creameries in southern Nebraskat. He is a Republican, and was His

nore, Gage, Hamilton Jekerson, Polk, Saline, aundres, Seward, Thayer, and York.

William A. McKeighen, of the Fifth District, was born of Irish parents in Cumberland County, N. J., Jan. 19, 1842, and moved with the family to Illinois, where they set-tled on a farm. He enlisted in the 11th Ill. Cav., and after the war settled on a farm near Pontiac, Ill. He was quite prominent in organizing farmer associations in the State. He was elected to the 52d Congress on the Alliance and Democratic tickets, and last Fall went through as an independent, receiving 17,490 votes, against 14,230 for the Republican candidate. His district is composed of

Can candidate. His district is composed of 18 Counties.

Omer Madison Kem, of the Sixth District, is an Indianian by birth, being born Nov. 13, 1855, in Wayne County. He was brought up on a farm and received a good education. He removed to Custer County, Neb., in 1882, where he took a homestend and resided there until 1890, when appointed Deputy Treasurer of the County. He was elected to the 52d and 53d Congresses as a Populist—Inde-pendent receiving 15,328 votes, against 12,-197 for the Republican candidate. His district comprises 33 Counties.

#### NEW JERSEY.

Henry C. Loudenslager, who represents the First District, composed of Camden, Cape May, Cumberland, Gloucester, and Salem Counties, was born in New Jersey in 1852. He was reared on a farm, and after receiving a rudimentary education embarked in the produce business in Philadelphia, where he remained for over 10 years. He was elected

Democratic opponent's 22,511.

John T. Dunn, of the Eighth District, has career which reads like that of a novel. his biography he says that he was born in 1838, and has resided in New Jersey since he was seven years of age. "Owing to the death of my mother when I was four years old, my father, having a large family of children, placed me with a farmer, who agreed to give me three months schooling each year until I was 16 years old. The farmer neglected his part of the contract, and at 11 years of age I did not even know the alphabet. Unable to longer endure the alphabet. Unable to longer endure the hardships and abuse of the farmer, I ran away and shipped as a cabin boy on a vessel trading with the West Indies. Two years trading on the ship later my older brother found me on the ship at Philadelphia and took me to Gloucester City, where I was engaged as a bobbin boy in a factory. Later I learned the trade of iron a nolding, subsequently brass turning and silver burnishing, and also painting. While serving as an apprentice at the latter I learned the alphabet, and by the help of the men in the shops master d reading, writing, and arithmetic, and by employing my evenings and holidays and Sundays I acquired all the education I possess." He became a lawyer and held several prominent positions in his town of Elizabeth. He was elected to the 53d Congress as a Democrat, receiving 14,393 votes, against 13,400 for the Republican

John DeWitt Warner, of the Thirteenth District, was born in Yates County, N. Y., in 1851, and worked on a thrm until he was 17 years of age. During this time he managed to prepare himself for college, and after graduating he took up law and mastered that. He was elected to the 52d and 53d Congresses as a Democrat, receiving last Fall 18,979 votes, against 11,181 for his Republican

adversary.
William Ryan, who represents the Sixteenth District, was born in Tipperary, Ireland, in 1840, and came to this country with his parents, who settled in Connecticut in 1844. He attended the district schools during the Winter and worked on the farm dur-ing the Summer until 1858, when he went to the Rocky Mountains and settled in Central He returned to New York after the war and entered business as a farmer and merchant. He was a member of the State Assembly in 1891-'92, and served as Chairman of Public Lands and Forestry and of Taxation Committee, devoting his attention as a legislator chiefly to the improvement of the highways in his district. He was elected to

first District, comprising the Counties of Greene, Montgomery, Otsego, Schnectady, and Schoharie, was born in New York in the proposition before the Legislature and the | in the schools of his native town, Rotterdam Governor, in which I secured the adoption of the plan by the State." He was elected on and at the present time is extensively engaged in farming. As a Democrat he ceived 24,507 votes, against 23,187 for the

### NORTH CAROLINA.

Matt W. Ransom, United States Senator, is lawyer and a planter, and has always been ngaged as such. He was born in Warren County, N. C., in 1826, and received a good education. He served in the Confederate army and is a Democrat. He entered the Senate and has been there since 1879. His present term will expire March 3, 1895. Sydenham B. Alexander, of the Sixth District, composed of the Counties of Anson, Brunswick, Columbus, Mccklenberg, New

lanover, Pender, Richmond, Robeson, and Union, is a Democrat. He was born in Mecklenburg County, Dec. 8, 1840, and received a good education. By occupation be ever since the close of the war, in which he served on the Southern side. Of the total number of votes he received 16,624, while his chief adversary, who was a Republican, received 12,127.

### оню.

George W. Hulick, who represents the Sixth District, composed of Brown, Clermont, Clinton, Greene, Highland, and Warren Counties, was born in Batavia, O., June 29. 1833, and is a Republican. He went to school in Winter time and worked on his father's farm in the Summer. He took a course at Farmers' College, and after graduating, took up law and was admitted to practice He has held many public offices in his State, and was elected by a vote of 21,341, against

18,091 for the Democratic candidate.

Darius D. Hare, of the Thirteenth District, was reared on a farm and received the education of a common district school. He was born in Ohio Jan. 9, 1843, and he has been living in that State ever since. He was in the Union army, and after the war took up the study and practice of law. As a Democrat he received 24,186 votes, against 17,037 for the Re-publican opponent. His district comprises Crawford, Erie, Marion, Sandusky, Seneca, and Wyandot Counties.

James A. D. Richards, who represents the

Seventeenth District, was born in Boston, Mass. March 22, 1845. He went to Ohio at and taught school, in order to raise money ugh to take a law course. to Congress as a Democrat, his Republican adversary receiving 16,723 votes, against 23-, 077 for himself. His district comprises 077 for himself. octon, Holmes, Licking, Tuscaraw

Wayne Counties.
Stephen A. Northway, of the Nineteenth District, was the son of a pioneer, and saw much hard service in his youth. He was born in Christian Hollow, O., June 19, 1833; removed with his parents in 1849 to Orwell township and occupied a pioneer's cabin in the woods, where all the family able to work ed in clearing a farm. He attended school and taught to obtain money necessar was elected to Congress on the Republican for his Democratic adversary. His district Geagua, Portage, Summit, and Trumbull.

OREGON. William R. Ellis, who repre ond District, composed of 14 Counties, was born in Waveland, Ind., April 23, 1850; re-moved to Guthrie County, Iowa, in 1855;

worked on a farm and attended the district school until he was 18 years of age, when he divided his time between working on a farm and teaching country school until after be had arrived at manhood. He attended school at the Lowe State Agricultural Colleges in the Sixth District, was born in Virginia at the Iowa State Agricultural College a Ames and took up law. He removed to Ore-gon in 1883, and was elected as a Republican on a vote of 15,659, against 12,120 for his Democratic opponent.

PENNSYLVANIA. Josiah D. Hicks, of Altoona, who represents the Twentleth District, composed of Blair, Bedford, Cambria, and Somerset Counties, was born in Pennsylvania in August, 1844. In early life he assisted to the support of his father, who was a blacksmith, by working around among the farmers of his section. In 1868 he started in farming for himself and continued at it for four years, and then took up the study of law. As a Republican he rereived 22,601 votes, against 17,420 for the emocratic candidate.
Thomas W. Phillips, of New Castle, who

the Twenty-fifth District, was born Feb. 23, 1835, and was the youngest of a family of eight children. He was brought up on a farm and managed to secure a fair education. When petroleum was discovered in Western Pennsylvania he, in com pany with his brothers, embarked in the business. As a Republican he secured 19,650 votes, against 15,659 for his Democratic oppo-nent. His district is composed of Beaver, Butler, Lawrence, and Mercer Counties. Joseph C. Sibley, of the Twenty-sixth Dis-

trict, which comprises Crawford and Erie Counties, was born in New York Feb. 18, 1850. He is extensively engaged in farming and stock raising, and has been President of the Pennsylvania State Dairymen's Association, twice Director of the American Jersey Cattle Club, a member of the State Board of Agriculture, and a Director of the National Association of Trotting Horse Breeders. Though a resident of th Twenty-seventh District, he was nominated for Congress in the Twenty-sixth District by the Democratic, People's, and Prohibitionis Parties. He received 17,887 votes, against 14,500 for the candidate on the Republican

George F. Kribbs, of the Twenty-eighth District, was born on a farm Nov. 8, 1846. His early life was like that of all other farmer's sons and he was obliged to labor hard during the Summer months. After attaining his majority he entered college, studied law, and was ac mitted to practice. Served in the 52d and was elected to the 53d Congress as a Democrat, receiving 17,285 votes, against 13,284 for the Republican candidate. His district is formed by Center, Clarion, Clearfield, Elk, and Forest Counties.

#### RHODE ISLAND.

Charles H. Page, who represents the Second District, was born in the State July 19, 1843. When 11 years of age he was thrown upon his own resources. He left home and worked upon a farm and devoted all his time to farming until he was 19 years old. He enlisted in Co. A, 12th R. I., and served through the war. After its close he again went to farming and continued at it until 1868, when he gave the business up and began the study of law. He has been quite prominent in politics, served in the 52d and was elected to the Congress as a Democrat, receiving 10,770 votes, against 10,020 for the Republican candidate.

W. Jasper Talbert, of Parksville, who repre sents the Second District, composed of the Counties of Aiken, Barnwell, Edgefield, Hampton, and part of Colleton, is a native of the State, and was born in 1845. He was in the Confederate army and after the war engaged tention and labor. He has held several offices the Alliance. He was elected to the 53d Congress, receiving 8,001 votes against 30

Asbury C. Latimer, of Belton, who repreents the Third District, was born July 31, 1851, on his father's farm near Lowndsville, He spent much of his life in active agricultural pursuits. He is a member of the Alliance and has taken a great interest in that organization, having represented his County and State in the National Councils. He was Congress as a Democrat, receiving 25,795 votes, against 19,312 for the Republican can-

> federate service, where he served for four years, rising to the rank of captain. After the war he resumed farming, at which he has been engaged continuously. 10,401 votes as a Democrat, against 1,730 for his Republican opponent.

### SOUTH DAKOTA.

William V. Lucas, of Hot Springs, Representative-at-large, was born on a farm near Delphi, Ind., July 3, 1835. In 1856 he re-moved to Iowa, where he pioneered it on a farm until the outbreak of the war, when he enlisted in the 14th Iowa as a private soldier, leaving the service as Captain of his company. He removed to sound 1883 and engaged in farming, which occupation he is still following. He was elected as a Republican to the 53d Congress, receiving 33.288 votes, against 24.659 for the People's Party candidate, and 14,218 for the Democratic nominee.

### TENNESSEE.

Benjamin A. Enloe, who represents the Eighth District, composed of 10 Counties, was born near Clarksburg, Tenn., Jan. 18, 1848, and reared upon a farm. He secured a good education, and since 1867 has been quite active in political circles. He served in the 51st, and 52d Congresses, elected to the 53d Congress as a Democrat, receiving 13,038 votes, against 12,920 for the People's Party candidate.

James C. McDearmon, of Trenton, who represents the Ninth District, was born at New Canton, Va., July 13, 1844, but moved with his parents to Gibson County, Tenn., since resided. He was brough up on a farm, and when the war broke out he enlisted in the Confederate army and served throughout the war. At its close he took up the study of law and was admitted to pra He was elected on the Democratic ticket: receiving 14.334 votes, against 10.883 the combined votes of the Republican, Populist, and Independent Parties. His district includes Crockett, Dyer, Gibson, Haywood, Lake, Lauderdale, Obion, and Weakley

Josiah Patterson, of the Tenth District, as born April 14, 1837, in Morgan County Ala. and was brought up on a farm. He read law on his father's farm without the aid of an instructor and was admitted to prac-He entered the Confederate service and left with the rank of Colonel. He removed to Memphis, Tenn., in 1872, where he has since resided. He was elected to the 52d and re-elected to the 53d Congress, receiving 12,161 votes, against 4,785 for the Alliance

Jeremiah V. Cockrell, of Anson, who repre sents the Thirteenth District, composed of 80 Counties, was born in Missouri May 7, 1832 During the gold excitement he went to California, but returned in 1852 and engaged in farming, remaining at the occupation until the outbreak of the war, when he enlisted in the Confederate service. After the war he resumed farming and studied law. He moved to Jones County, Texas, early in the 80's, and was elected to the 53d Congress as a Demo-crat, receiving 19,921 votes to his Republican opponent's 1,629.

### TITAH.

Joseph L. Rawlins, the Representative of Utah Territory, lived upon a farm until he was 18 years of age. He was born in the State he represents March 28, 1850, and secured a good education. He is a lawyer by profession, and was elected a Delegate from

Paul C. Edmunds, of Halifax, who represents the Sixth District, was born in Virginia Nov. 1, 1836. He studied law and practiced his profession for some years in Missouri. He returned to his native State in 1858, and has been engaged in agriculture ever since that time on his farm near Halifax Courthouse. He served in the 51st and 52d Congresses, and was elected to the 53d Congress as a Demo rat, receiving 18,255 votes, against 13,849 for the People's candidate. His district is composed of the counties of Bedford, Botetourt, Campbell, Charlotte, Halifax, Montgomery, and Roanoke, and the cities of Lynchburg and Brancke. burg, and Roanoke.

#### WEST VIRGINIA.

James Capehart, of the Fourth District, was born in the house where he now lives in Mason County, Va. (now West Virginia), March 7, 1847. He attended college, but did not graduate. He has been engaged in firming and stockbreeding since 1865. He has held no office except that of President of the County Court of Mason County, which position he has held for several terms. He was elected to the 52d and 53d Congresses as a Democrat, receiving last Fall 22.006 votes. Democrat, receiving last Fall 22,006 votes against 19,924 for the Republican nominee.

Owen A. Wells, of the Sixth District, which omprises the Counties of Calumet, Fond du Green Lake, Manitowoc, Marquette Lac, Green Lake, Manitowoc, Marquette, Waushara, and Winnebago, was born in New York Feb. 4, 1844, and removed to Wisconsin when but a boy, his parents settling near Fond du Lac. He is a lawyer by profession, and is engaged in farming and stock raising. He is a Democrat, and was elected by a vote of 20,212 against 17,847 for the Republican conditions.

#### THE CROPS.

#### Report of the Statistician of the Agricultural Department for Aug. 10.

The August report of the Statistician of the Department of Agriculture shows that the condition of corn has declined a little over six points during the past month, the average for the entire breadth being 87 as against 93.2 for the month of July. lecline is due in the main to the drouth which has proved both extensive and persist ent. While in some parts of the country the continued dry weather has injured the crop beyond recovery, it is nevertheless true as to the larger portion of the area devoted there to that improvement is not only possible, but with a sufficient rainfall through the month of August will be assured. The averages in the principal States are: Ohio, 85; Indiana, 79; Illinois, 81; Iowa, 102; Missouri, 95;

Kansas, 82; Nebraska, 84.

There has been a considerable falling off in the condition of Spring wheat since month, amounting to something over seven points, the average condition the present month being 67, as against 74.1 for the month of July. The condition by States is as follows: Wisconsin, 70; Minnesota, 67; Iowa, 87; Nebraska, 58; South Dakota, 63; North Dakota, 66. This decline of seven points is the result of the too high temperature and deficient rainfall in the Sprin wheat States. The drouth has prevailed over extensive areas and has done much damage. Much injury also has been done this crop by the chinch bug and rust in several of

the States. The condition of Spring 1ye in August i 78.5, as against 89 in the month of July. The condition of oats has fallen 10 point since the July report, being 78.3 as compared with 88.8 last month, while in August, 1892, it stood at 86.2. It is the lowest condition reported in August for many years, and is due to a cold, wet Spring succeeded, by con-tinuous dry, hot weather during the latter part of June and the whole of July.

The August returns for barley show slight decline in condition from that of las month, being 84.6 against 85.3 in July, and

The acreage of buckwheat is reported at 96.3, as compared with 1892, and condition

a plurality of over 7,500 over his Republican candidate. His district is composed of Abbeville, Anderson, Newberry, Oconee, and Pickens Counties.

George W. Shell, of the Fourth District, was born Nov. 13, 1831, in Laurens County, S. C., where he has ever since lived. He falling off, and rain is needed badly to pre vent further disastrons losses.

The condition of the timothy crop is 89.6. as compared with 93.2 in 1892. The hay crop on the whole is large, and has generall been secured in good condition, although in some important regions unfavorable conditions caused a reduction of the crop.

The general average of tobacco fell from 93 n July 1 to 82.2 on the first instant. A still further decline in the condition of apples is made evident by the returns of August. The indication that the commercia crop would be very light is confirmed at this date. In many of the States a complete failure is reported. The drouth has done some damage to peaches in the Atlantic peach belt. Complaints are frequent of premature ripening. Conditions still point to a large crop in this section, however, and local howers have benefited some localities further decline is noted in Michigan, where fruit has dropped severely. California has a good crop of excellent quality. An abundant crop of grapes is promised at this date. percentages of July have been generally maintained. Dry weather has tended to check the spread of rot and mildew.

The crop report of the Department of Agriculture for the month of August makes the condition of cotton 80.4, a decline of a little over two points since last month. This is the owest average for August ever given out by the Department. The averages by States are, for Virginia, 88; North Carolina, 84; South Carolina, 75; Georgia, 83; Florida, 92; Alabama, 79; Mississippi, 81; Louisiana, 89; Texas, 72; Arkausas, 89; Tennessee, 83. The general averages in August for several years are as follows: 1892, 82.3; 1891, 88.9: 89.5; 1889, 89.3; 1888, 89.3, and in 1887 it was 93.3. The present low condition is the consequence of an excess of rain in the early part of the season, followed by hot, dry weather during the month of July. Rust is enorted as a cause of injury to the crop in labama, Mississippi, and Tennessee, and the boll worm and caterpillar have damaged the crop more or less throughout Alabama, Louisiana, Texas, and Arkansas. Shedding is als reported as occurring in some localities.

Since the first of August the drouth ha een broken and rain has visited the cotton belt, excepting parts of Tennessee, Mississippi, and Texas, where it is badly needed. In some portions of Mississippi and Alabama too much rain for the good of cotton is an-

Wentworth Verney, Pittsfield: I received the watch all right, and am much pleased with it. It keeps perfect time, and is worth a great deal more than I thought it would be for that price.

#### Shooting Pains All over my body and



suffering. In the Spring I was completely worm out and ate hardly enough to keep me alive. I have been taking Hood's Sarsaparilla, and the swelling has subsided. gone, I have good appe-MRS. A. G. OMAN, 34 Newman Street

Hood's Sarsaparilla Cures. Hood's Pills oure Sick Headache. 25c.

### THE 53D CONCRESS

#### Petitions Presented and Bills Introduced of Interest to Agriculturists.

Senator Cullom, of Illinois, presented a large number of petitions which accumulated during the last extraordinary session of the Senate, of citizens of Champaign, Gallatin, Franklin, Randolph, Clay, Clinton, White, and Christian Counties, all in Illinois, pray-ing for the appointment of a committee to in-vestigate the combine formed between millers, vestigate the combine formed between millers, railroads, and elevators for the purpose of depreciating the price of wheat. Referred to the Committee on Agriculture and Forestry. Senator Call, of Florida, presented a petition of sundry citizens of Florida praying that an appropriation of \$200,000 be made for the purpose of establishing and maintaining an agricultural college and university, to be located near Terre Cais Ray Manates Caunty. cated near Terra Ceia Bay, Manatee County, Fla. Referred to the Committee on Agricult-

are and Forestry. Senator Mitchell, of Oregon, presented a petition from the State Grange, Patrons of Husbandry, of Marion County, praying for the construction of the Nicarauga Canal. Reerred to the Committee on Foreign Relations. He also presented a petition of the State Grange, Patrons of Husbandry, of Marion County, praying for the adoption of an amend-ment to the Constitution of the United States, providing for the election of United States Senators by direct vote of the people. Re-ferred to the Committee on Privileges and

He also presented a petition of the State Grange of Marion County, Ore., praying Con-gress to immediately reopen the mints of the country to the free and unlimited coinage of both silver and gold on equal terms at the present ratio of 16 to one; that the Government use the coins of both metals without discrimination, and that the metallic currency be supplemented by the use of United States notes in sufficient amounts to prevent the con-traction of the currency of the people by the hearding of gold by the banks, to the end that the volume of money shall not fluctuate, thereby unsetling the value of our farms, our stock, and our products, and opposing the repeal of the present law, known as the "Sherman law," unless a law providing for an enlarged use of silver or for its free coinage be enacted in lieu thereof. Referred to the Com-

enacted in lieu thereof. Referred to the Com-mittee on Finance.

He also presented a petition of Grand Prairie Grange, 26, of Junction City, Ore., praying for the passage of legislation pro-hibiting the dealing in options and futures. Referred to the Committee on the Judiciary. Senator Vest, of Missouri, introduced a bill to create a bureau in the Department of Agriculture for giving public information of Agriculture for giving public information of the production of live stock. Referred to the Committe on the Transportation and Sale

of Meat Products.
Senator Mitchell, of Oregon, introduced a bill to extend the provisions of "An act to amend section eight of an act approved March 3, 1891, entitled, 'An act to repeal the timber culture laws and for other purposes,'" to all of that part of Oregon lying east of the Cas-cade Range. Referred to the Committee on Public Lands.

He also introduced a bill for the development and encouragement of silk culture in the United States under the supervision of the Secretary of Agriculture. Referred to the Committee on Agriculture and Forestry. Senator Pettigrew, of South Dakota, intro-duced a bill authorizing and directing the

Secretary of Agriculture to cause to be made all necessary field examinations, surveys, and experiments for the purpose of demonstrating the extent, etc., with reference to irrigation of the underflow waters between the 97th degree of west longitude and the foothills of the eastern slope of the Rocky Mountains and make an appropriation therefor. Referred to the Committe on Irrigation and Reclama-

tion of Arid Lands.
Senator Carey, of Wyoming, introduced a bill granting to the State of Wyoming certain lands in the Fort D. A. Russell military reservation for agricultural fairs and in dustrial exposition grounds and for other purposes. Referred to the Committee on purposes. Referred Military Affairs.

### CORN IN MEXICO.

#### Encouraging Increased Consumption of the Staple in Our Sister Republic.

During the year ending June 30, 1893, by far a larger amount of maize, or Indian corn, produced upon the farms of the western rts of the United States has been consumer n Mexico, by direct encouragement of the dovernment of that country, than ever be fore, probably, and certainly during any similar period. This is according to the July report of Statistician of the Agricultural Department. The unusually large and constant export of this foodstuff to that country has been demanded by the imminence of starva-tion of many of the people of Mexico, by reason of the failure of the corn crop there, and measurably of other crops also, during the years 1891 and 1892, a failure from which there has not yet been a full retrieve, and

which itself has been caused by long drouth But, notwithstanding maize furnishes the almost universal and the principal article of daily sustenance to the people of Mexico, the amount annually consumed per capita does not appear to be at all remarkable, assuming that most of it grown in the country is there-in utilized for human food. According to the statistics of production gathered by the Government in 1890, presumably for 1889, and published in the Semi-Annual Bulletin No. 5, of the Ministerio de Fomento (or, as we might say, Department of Industries), the yield throughthe country was less tha bushels; and as the estimated population at that time was about 11,500,000, the possible consumption, barring importation, which then was inconsiderable, was less than seven

bushels per capita.

The wheat raised in the country the same year aggregated only 9,733,485 bushels, according to the same authority, and supplemented maize to the extent of a little less than 0.85 of a bushel per capita; and the 23,576,368 pounds, or 405,489 bushels, of rice raised also supplemented it not quite 0.04 of a bushel, or 2.32 pounds, per capita. These being the cereals mainly used, the aggregate cereal consumption appears to be at the rate of about 7.90 bushels per capita yearly, of which nearly 87 per cent. is maize, a fact which demonstrates its great and paramount

importance. During the year 1892, we exported 5,840,918 bushels of corn, the value of which ras \$5,639,371 on the frontier.

During January and February, 1893, arther shipments through these ports further shipments through these ports amounted to 476,848 bushels, of \$363,066 invoice value. Consul-General Sutton, a careful officer, long resident in Mexico, estimated the full receipts of American corn into that country for the 14 months, the 12 of 1892 and two of this year, through all ports, at 11,000,000 to 12,000,000 bushels, and as worth \$10,000,000. This was equal to a bushel per capita of the population, or to one-seventh of the production of Mexico in 1889, and to a little over .0052, or over one-half of one per cent, of the production of the United States for the same year, the product being, by the census returns, 2,122,073,443 bushels.

## Peru Wants Good Cattle and Sheep.

The Secretary of Agriculture for the United States is in receipt of a communication from M. Alfredo Solf. United States Consular Agent at Chicklayo, Peru, stating that by request of several of his farmer friends in that section he desires to obtain information as to where in the United States he can secure representative animals of the best European breed of cattle and sheep. He inquires par-ticularly for the Durham or Shorthorn, Holstein, and Swiss breeds of cattle, and for the best English sheep, uniting large production of mutton with good quality of wool



#### This Is the Way of the World.

Mary is true
And June a coquette;
The difference I knew
The moment we met;
But the heart's predilection
One cunnot restrain;
I fear my affections
Are given to Jane.

New York Press.

#### Love Lightens Labor.

A good wife rose from her bed one morn
And thought, with a nervous dread,
Of the piles of clockes to be washed, and more
Than a dozen of mouths to be fed;
The meals to get for the men in the field,
The children to fix awny
To school, and the milk to be skimmed and
churned;
And all to be done that day.

It had rained in the night, and all the wood
Was wet as it could be;
There were puddings and pies to bake, beside
A loaf of cake for tea.
And the day was hot, and her aching head
Throbber wearily as she said:
"If maidens but knew what good wives know
They would be in no haste to wed."

Jennie, what think you I told Ben Brown?" Called the farmer from the well:
And a flush crept up to his bronzed brown,
And his eyes half bashfully fell.
"It was this." he said, and, coming near,
He smiled, and, stooping down,
Kissed her cheek: "Twas that you were the best And degrest woman in town!"

The farmer went back to the field, and the wife,

In a smiling, absent way,
In a smiling, absent way,
Sang snatches of tender little songs
She'd not sung for many a day,
And the pain ip her head was forgot, and the
clothes
Were white as the foam of the sea;
Her bread was light and her butter was sweet
And as golden as it could be.

"Just think," the chidren all called in a breath
"Tom Wood has run off to sea!
He wouldn't, we know, if he only had
As happy a home as we."
The night came down, and the good wife smiled
To herself as she softly said:
"Tis so sweet to labor for those we love,
It's not strange that maids will wed."
—Building Association Record,

MRS. Henry Ward Beecher, though over 80 years of age, spends hours every day at her writing desk.

\* \* \* GREAT interest has centered around the juries of award that are to be appointed by the Board of Lady Managers. appointed, but up to date has not been The whole is badly rusteaten, and looks mission. It is hard here, as elsewhere, to touched bottom at Ararat. keep politics out and to get the right women in the right place.

WHEN Philippa Fawcett came out at the head of the Wrangler's list three years ago her wonderful triumph was regarded by the male majority as something amusing. The university authorities were not going to give her the title of Senior Wrangler, though she did come out at the head of the poll. They merely smiled upon her approvingly, not unmixed with amazement.

### OUR WORLD'S FAIR TALK.

# A Stroll Through the South End of

LA RABIDA. On the 1st of July a long procession with the Columbian Exposition started, and we are nowhere near the end yet. Down town at the new art building have been assembled the most interested men and women of the whole world to discuss questions of education, literature,

You enter from the south by a short flight of steps a room high and well lighted. This is the chapel which comprises the east wing of the structure. It is not unlike the interior of any unpretentious chapel of to-day, except that some articles are offered for sale in booths in the different corners.

There is, back of the altar, the famous as tall as a clothes post, and not less than | did, he could go alone.

relics of Columbus, and is one of the most interesting buildings to be seen by

said she never pledged.

Throughout the building are pictures large and small, many of indifferent workmanship, celebrating the principal events of the life of Columbus. On the whole, the building has much to interest and much to instruct, and as you make out a list of the buildings you intend to visit when here do not forget to put La Rabida very near the head. Keeping to the lake and passing south,

that time.

we come to the Krupp gun works. Here we see the largest gun in the world and old cross and some good pieces of mosaic. | all of the most modern shooting irons, Perhaps the most attractive article here | big and little. These are the "corrupt is a huge iron anchor, undoubtedly used | works that the Hoosier lady said she did by Columbus on the Santa Maria. It is not want to see, and that if her husband

A little farther on is the Indian school.

where are shown the results of patient,

shoe and saddle making.

Next we come to the leather and shoe

exhibit, a large, well-filled building, with

much to attract. Here are mounted all

kinds of animals, valuable for their furs,

After looking about awhile, you con-

clude that Americans may justly claim

You can find a pair of shoes for every

choice. All of the fittings of a modern

shoe store are there, and the most wonder-

The Forestry Building, in your line of

march, is like a rustic chapel in appear

ance, it being made of hewn logs. It is

a long, low building, covering a good

stretch and contains several miles of

Here, as elsewhere at the Fair, Cali-

fornia has made a very attractive exhibit.

The little rooms partitioned off in its exhibit have walls of the choicest speci-

mens of red wood, laurel, walnut, oak,

Washington has a fir log there from

tree that was over 400 years old.

Michigan and Wisconsin have displays

that do justice to their splendid forests.

Mississippi shows us some of her beautiful finishing lumber, and Kentucky has

there the hollow bole 11 feet in diameter,

famous because it came from the birth-

Among the most notable foreign ex-

of this little booth is the largest slab of

teak wood in the world. It is five feet

neering woods here are exceptionally

Then Mexico shows us in a pleasing

and corks. Ontario makes a specialty

Japan has much bamboo manufact

ured into useful household articles, and

many varieties of finishing lumber and

fragrant woods.

This is the building you must visit if

ffects and combinations have been

greatly studied. One entrance was

made by the Lumber Manufacturing

Association, and is a great credit to

All over the building are views illustrating different methods of lumbering

and glass cases of pressed foliage and blos-

Throughout the entire building

place of Jefferson Davis.

ber is sent to Liverpool.

pairs of shoes cut out and finished.

from sea and land.

and maple.

resemble the great man whom these Nomemen say did not discover America;

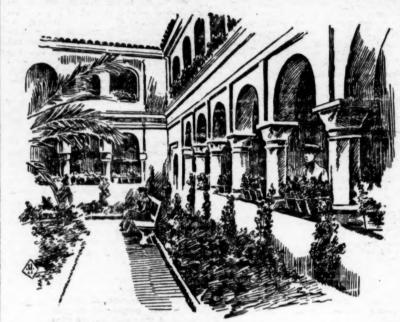
the first gold taken back to Spain from the West, and coins struck off in com-

Then, too, there are many manuscripts

written by Columbus and by contempo-

rary navigators. There is a fac simile of Isabella's jewel case, which contained the

jewels which a man standing near by



IN THE PATIO.

four inches in diameter through the This board has in all 57 appointments to thickest part. It is not of the same promake. These must all be confirmed by portions as those used by seafarers tothe Commissioners, and it seems a great day. It is long in the shank, and the here represented, from dressmaking to Summer. the Commissioners, and it seems a great day. It is long in the shank, and the task for the men and women to find cross piece is very short and very much jurors they both like. Kate Field was curved. At the top is a huge ring. confirmed by the members of the com- as if it might have been the one that first

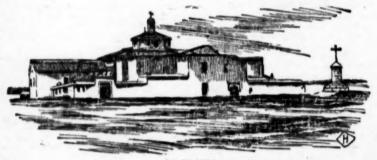
> The walls are filled with pictures, all in some way bearing upon the life and work of the navigator.

A descent of a few steps at the rear to be the best shod people in the world. leads you to an open court. Here we have beautiful shrubs and cooling palms | member of the family, from the baby to waving their fan leaves. From this grandma, regardless of their peculiar court, on four sides, open numerous little rooms, all filled with the choicest relics. In one we find a pile of stones ful machinery is working, and if you can protected from the public by a heavy stay a whole day, you will see 1,000 ron paling, and we find upon inquiry that these are all of the fragments left from the city of Isabella.

In the same room is the first bell that ever rung in America. It looks not unlike the dinner bells used by country landlords here in the West to-day.

A little farther on we see a fac simile of the metal box thrown overboard by Columbus at the time of mutiny among of notable celebrations in conjunction his sailors. On one of the corridor walls are hung maps showing the growth of geographical knowledge; a little farther Columbus's globe is seen proudly mounted on a fanciful high pedestal.

We press on, and find finally the "Columbus Room." This is a portrait art, and science. At Jackson Park dif- gallery. The walls are crowded with



ferent organizations and different na- | bust pictures of that daring man. One tionalities have in their turn met, ex- artist gives him a heavy jaw and the changed greetings, and parted barely in time to make way for the one which We have heard the was to follow. wonderful Swedish-American chorus, one picture he has much hair and a sions, and watched the Highlanders dance their favorite "fling" to the music of divers droping to the music of dro music of divers droning bagpipes. All these have been charming pictures thrown out in bright relief upon an ever-varying background.

We find ourselves on a bright, sunny morning down on the Lake front with just enough wind blowing landward to mellow the rays of the August sun. After admiring the beach and watching the exhibit of the life-saving crew, we are now attracted by a low gray building that seems to have nothing in common, architecturally, with the other buildings in the Park.

It is the Convent La Rabida, and landmark yet standing but three miles to reveal the first, which is rumored to from the city of Palos, Spain. It be a portrait taken from sittings.

six of their friends to subscribe for The will drain the ground much bette serves as shelter for all of the personal

It may be that of the scores one does

American Farmer, at 50 cents each.

coarse features of an Ethiopian; another, long, delicate features, not unlike those generally ascribed to the Christ. In in another, he is "shaven and shorn,' and dressed like a priest.

Conspicuous among these portraits are the "Moro," which is thought by many art critics to have the greatest claim to authenticity. It has a beautiful allegorical frame, which does much to enhance its beauty. Under the finishing coat is the name of Columbus. Another is the "Lotto," in which he is portrayed as a much older man with long, white hair. Still another, in which the subject has no hair at all, is loaned by the Duke of Veragua, and is said to resemble, in cast of features, the descendants of Columbus. This canvas has been twice covered, and is an exact fac simile of that old the second picture was removed in order

forest, now like the odor of a sweet Any of our young friends can earn a

s a delicate fragrance, now like a pine

A New Said Divider.

Russia has sent over a machine whereby centrifugal force is applied to the sorting of graind. The grain is empbut certainly he must have been an adept contortionist if they all look like him. The best way is to choose the one you tied into a mammoth coffee grinder, only instead of being ground as it escapes at like best. In the effort you are apt to think he is a myth, perhaps, anyway, and you are about to give it up when a the bottom it is by means of belts set in rotary motion. The power applied may be hand or it may be connected to windmill or a treading machine. guard asks you if you have "seen the dust of Columbus?"

The entire apparatus is surrounded by a circular curtain like a side-show tent You are shown a glass locket containing a few grains of sand, and your imagination and the composite portrait en-able you to see him planting the flag on with the top taken off. The good wheat is hurled up against the cloth walls and forms an outside eircle, while the poorer In the same case are coins made from

drops around the center. Our grandfathers were working on this line when they used to throw their grain up against the side of the barn by the handful. memoration of the marriage of Isabella and Ferdinand, and also coins used at

#### The Sacred Pair.

The sacred cattle that have as a temporary habitat one of the stock pavilions attract much attention. In spite of your-self you keep thinking of them as camels, probably because they are so ungainly and have humps and steep rumps. Still there is much to suggest the Jersey about them in color, in texture of skin, and in the little smooth legs. The heifer has never given milk, and has no indication of great milk capacity. The milk of this breed is very rich and sweet, and probably the animals will never lose favor in a country of long journeys and scarcity of water.

#### They are Coming.

Ten riding and 11 trotting horses from the royal stud of Russia are expected to arrive at the Fair within a few days. Two of the horses are fullblooded Arabian chargers. All will be quartered in the stock pavilion.

#### Fashion's Fancies.

It is a little odd that so universal a style as the Eton suit can be so varied and made so attractive. Every kind of goods are used, from white dimity to the various hues of gingham, and they are be worn a delicate color of silk in a waist or a white linen. With the ging-hams are also worn silk waists that either her influence to make the attractions of farm contrast strongly in color or else are of a and home life such that she can keep her boys tone that will melt into that of the skirt and girls with her still, as they grow to man-and jacket. One very pretty suit was of and jacket. One very pretty suit was of pale-blue gingham, with white braid around the bottom of the skirt in serpentine rows, and a puffy, white, silk waist to balance. Another was a combination of dark blue and white and still another of dark blue and Scotch plaid.

Blue is now, as always, the color par excellence for utility waists. Blue serges, with full, unlined skirts, short, Eton jackets turned well back into stiff revers and gayly colored silk fronts shaking their still more brilliant selvages between the stitched edges of the jacket, are the chosen favorites of working as



Loose jackets are extremely popular for informal work-a-day wear, while tighter ones are permitted for half-dressy occasions. An excellent model in red and white is here given. The style is English and is named "jacket-blouse." The jacket fits rather closely and extends below the waist line, Slashed revers very moderately touch the sleeves, which are not over-large. The edges are all stitched around with white silk, and three mother-of-pearl buttons are set down the front. The waist proper is a blouse of emphatic proportions in white silk, striped with red. is turned down. A sailor hat-the undying sailor-is of white straw, banded with red ribbon, which ends in two flaring ears at the side.

And what of those pretty filmy hibits is one from Siam. In the center dresses that are just what our mothers wore 35 years ago? Shall we go on and tell of more muslins and lawns three inches by nine feet in size, and as and organdies?

highly polished as a mirror. The ve-One is of creamy background with old lavender and pink and white flower fine. There is also quite an exhibit of bunches put on in profusion. There was a very full ruffle around the bottom, and over the shoulders fell a full bertha of yellow lace. A girdle made way her decerative woods, dyes, barks, of old pink, lavender, and pale olive of spruce and pine, and, as supports to green ribbons was started at the front large arch, are two mammoth pillars, with a bow of each and ended in the square, but unfinished, just as the lumback with a large bunch of long bows

Another that cost much more was a delicate dove shade, and was made over a tight-fitting princess of pale yellow China silk. The skirt had two wide, full ruffles 12 inches apart, with you are soon to have a new house, as three tucks in each. There was a full, round waist, belted down by a wide corn-colored sash of soft silk. sleeves were tight fitting to the elbow,

but there they turned into large puffs. The most striking part of the costume were the corn-colored ribbons, three in number, that started from rosets, one on each shoulder blade, and were draped in different lengths to the underside of the cuffs. These ribbons were left quite loose, and added much to the beauty of the back view of the gown.

One hundred feet apart seems to watch and chain in an hour by getting about the right distance for tiles. They six of their friends to subscribe for THE | will drain the ground much better than

#### WOMEN'S WISDOM.

TO EVERY WOMAN.—For the present, we have this broad offer to make to all readers of The Formhouse Department: We will give a full year's subscription to THE AMERICAN FARMER to each friend who will send one-half column of available matter within that year. Subscription may be a new one, or it may be an extension of one already in our books.

CONDITIONS.—But note this: We shall apply at least three tests to every article, viz.: Is it brief? Is it fresh and bright? Is is really interesting to women? Let intending contributors apply these tests before sending their matter. In range of topic these may cover everything of special interest to women. Indifferent, prossy, or stale matter is not wanted. We want to hear from our cleverest women, with facts, fancies, and experiences all their own; about their housework, fancy work, or the training and education of their boys and girls. The contribution may be upon one subjector composed of short paragraphs on a variety of topics. All MS, must be written on one side of the paper only. All communications for this department, eare of THE AMERICAN FARMER, Washington, D. C.

#### Rag Carpets.

EDITOR FARMHOUSE: I have just finished one of my Spring carpets, made mostly of cotton rags of my children's old clothes. I first procured dyes of black, blue, green, red, and yellow. Used mostly diamond dyes for cotton. Do not use dyes for wool in dyeing cotton rags, as it will fade; but if you cannot get dyes for cotton, send direct to manufacturer and get the desired colors by mail. I colored my rags before cutting and sewed them together in strips about six or eight them together in strips about six or eight inches long, of each alternate color. I used six colors—blue, black, green, red, yellow, and white. It is considerable trouble, yet the carpet is so strangely mixed that anyone feels that she is repaid for her trouble. I used white chain (warp). If I should make another like this, I would use the same colors in the warp that I used in the filling.

Now, I will give a good recipe for coloring

Now, I will give a good recipe for coloring cotton yellow: 10 cents worth of sugar of lead, 20 cents worth of bicromate of patasoa. Dip in first and then in second and repeat until you have the desired color. Dry in shade. It will not fade. Use luke-warm water. - AUNT KATE.

#### How to Keep the Boys on the Farm.

EDITOR FARMHOUSE: A few evenings since, while we were engaged in reading, there came a gentle rap on the door. We attended the summons and who should come in but THE AMERICAN FARMER. We were all glad to make his acquaintance, and hope the visit, although his first, may not be his last. In Aunt Minerva's chat on "Women's Wis dom" I was much pleased with her closing words: "It is well to adorn the home, but still more important that we adorn the mind. It is in the molding, directing, and training of the gradually-unfolding characters of our very pretty just fresh from the laundry.
With the white dimity or percale may

Of the gradually-unfolding characters of our dearly-loved sons and daughters, the pride of our hearts, where woman's wisdom manifests itself and makes itself felt long after their

ever anxious, as they term it, to "work

I am sorry to say that many of our farmer's boys are getting dissatisfied with the monotony and routine of ordinary farm life. They are restless and uneasy in their present situations, and are looking with longing eyes upon the imaginary attractions of our great over crowded cities. They are strongly tempted by wonderful stories of wealth gained without labor, to throw themselves into the tide of speculation, which threatens to overrun our land. We suggest a remedy for this state of things, which, we believe, will commend itself to all thoughtful parents. It is this: Give them a patch of ground, an acre, or more, if they will give it proper care, and let them plant it as their taste dictates. Then let them have the proceeds. There is not one among us who would like to work for nothing the whole year round. Then, why blame the boys? We have but one boy, and he, like scores of others, was getting dissatisfied, and thought that the farm did not pay. I obtained per-mission of his father to let him have a patch of ground and raise whatever he chose, and have it for his very own. Then I advised him to set it to small fruit, which he did, by first starting a strawberry bed, then adding raspberries, mostly Cuthern. raspberries, mostly Cuthberts and Greggs. He now has over an acre planted, three-fourths of which will yield him a crop this season. There is no more talk of leaving the farm; but every book or paper he can get treating on horticulture is read with eagerness, and many experiments have been tried that have given him a love for the work. His success creates enthusiasm, and he is satisfied.

Mothers, if you wish to keep your boys with you, take an interest in their work. By taking the pruning shears and going into the taking the pruning shears and going into the berry patch with my boy, I not only en-couraged him, but found it beneficial for myself, as the pure air did me more good than medicine. Fearing I may overrun my half column I will have to wait till some other time to tell you how to keep the girls on the farm. - A FARMER'S WIFE.

#### Bread. EDITOR FARMHOUSE: There are nearly

as many ways of making bread as there are people who make it, and the article, like its makers, may be "good, bad, or indifferent." I have made some which I am sorry to say might be described by the last adjectives, but of late years the first fits best, and, indeed, stronger ones like "lovely, delicious," are the ones most used by those who discuss my bread. And it is the simplest, easiest mode of any I ever tried and sure to be a success. Often people make good bread, but cannot give a formula that will insure another person's duplicating the loaf. My method is so exact, so simple, yet sure, anyone can secure the perfect results. Have good flour, and by good, I do not mean the highest priced, flucy, or even Winter wheat, if you do not care to afford it. Good, common flour can make delicious bread, white, fine grained, and sweet. Sift the flour; often put it through three times. For four loaves of bread take at night four cups of sweet milk, put this into your oatmeal cooker, f you have one, or in a basin that can sit is kettle of water. Put both water and milk over the fire, and when both have reached the poiling point look at the time and let it boil briskly 20 minutes. Now, pour this hot milk into your bread pan and add four even tablespoons of sugar, a half spoon of salt. Let it con till just warm, then add a dissolved soft yeast cake; or if you use dry yeast it should be soaked out at noon and stirred up with a half cup of flour and water. Stir the yeast in the milk, then add flour, smooth till you cannot stir in any more; till, in fact, it is a big loaf of bread as stiff as when you knead other bread. Now, sit down and take yeast in the milk, then add flour, smooth the bread pan in your lap, if you like, and stir that bread one way till it feels spongy and light; that will be but a few moments. Now, if you have a patent bread pan don't use the cover; just put a clean towel over the whole and leave it; not by a stove; just where it is comfortably warm in Winter and comfortably cool in Summer. In the morning rub a half teaspoon of flour on your molding board, pour out this big loaf and give it 200 molds. If out this big loaf and give it 200 molds. If you are able to keep a continuous steady movement it will take 10 minutes, perhaps. Don't add flour, only just to smooth the board. I would be sorry to have to use a tablespoon of flour in the morning. It would demonstrate that I did not stir in enough the night before. I like to find the morning loaf just sunk a bit, showing it has reached its lightest and on the yerge of turning. Now, divide into four the verge of turning. Now, divide into four loaves, roll smooth, grease each loaf, if you like that style of shiny crust. Prick deep with a fork: it will rise to three times its molding size. Bake as other bread; that is, in a well heated, but not a browning heat, extending to a three-quarter hour; perhaps less if your tins are long and narrow instead

of square. Of course, one should use judg-ment in cooking. A thick, square loaf needs

more time than a long slender loaf. This bread is not as sweet as you would expect from the sugar used. People often say, when I tell them the formula, "there was no sugar in that I tasted," and wonder when I say that is the way I made it. I have given the formula to many ladies, and their success is equal to my own. Try it.—The FARMER'S WIFE.

#### For the Home Table

Corn, as an article of food, has been much used in America, but not until very recently has it been shown into what delicate dishes it may be turned. When the subject comes up we think immediately of hot Johnny cake or mush. Owing to its cheapness an effort has been made by some of our energetic American women to have it popularized among the common classes. They have demonstrated that it can be used in the preparation of some of the most dainty dishes, and we know that the Indian long ago discovered that it was possessed of great strength-producing quali-

As a food for cold climates it is esspecially desirable, being rich in fatty as well as starchy matter. For the same reason it should be popular among farmers or those exposed to the severe weather. We give a few of the simplest and besttried recipes:

#### HOUSEWIFE'S PUDDING.

Put one quart milk in a double boiler, when hot, stir in sufficient cornmeal to make a stiff batter. Take from fire, and when cool add one cup washed currants, one cup chopped suet, half teaspoonful salt, one teaspoonful ground ginger, and one cup corn flour, and one teaspoonful baking powder. Beat, turn into a greased mold, and steam four hours. Serve hot with sauce.

CORNMEAL MUSH. Put two quarts of cold water in a good sized boiler. A boiler that will hold at least four or six quarts. Add a tablespoonful of salt. As soon as water comes to a boiling point stir as much granulated yellow meal as will nicely sink into water. Let the meal run between the fingers of the left hand while you stir with the right.

In different seasons of the year the meal will absorb more or less water, so the exact quantity can never be told, but as long as the meal sinks in the water add more, but the minute you see it floating on the surface stop immediately, no matter how thin the mush appears.

Stir from the bottom and side of the pot. Then place it on an iron rest or asbestos plate which will insure its not scorching. Let it cook for at least one hour, better two. Remember that the most thorough cooking of all starchy foods is very important.

Now, to serve hot with milk, it is ready. If you wish to fry, turn it out at once into square molds.

### FRIED MUSH.

Cut the mush into slices about onethird inch in thickness. Have ready a large square pan. The bottom well covered with smoking hot fat. This may be of oil, cottolene, or lard. Let it fry quickly on one side, turn it and fry on the other. To be palatable and good mush must be quickly fried so that the grease will not penetrate, and it must be nicely browned over the entire surface. Serve hot with butter or sirup.

### CORN DODGERS.

Put two cups of white cornmeal into a bowl. Pour over it sufficient boiling water to scald, being exceedingly care ful to just moisten the meal and to stir all the time. Add to the meal while hot a tablespoonful of shortening. When the meal is cool add one egg beaten until quite light, two tablespoonfuls of milk, and a teaspoonful of salt. Mix and bake in a large baking pan by spoonfuls. For instance, put the spoonful down and smooth it until it looks like a small griddle cake. Bake until brown on both sides. These, if properly cooked, make the sweetest of all corn breads.

Put two cups of cornmeal into a bowl. Add a tablespoonful of sugar, a teaspoonful of salt, two teaspoonfuls of baking powder, and mix it well to-Add a large tablespoonful of gether. butter. With your hands rub it into the flour. Add to this sufficient cold milk to make a batter that will drop, not pour, from the spoon. Bake on a griddle in muffin rings, same as you would ordinary muffins.

JOHNNY CAKE. Put one pint of yellow meal into a bowl and pour over sufficient boiling water to scald. The meal must be moist. not wet. Add tablespoonful of butter or cottolene. Moisten teaspoonful of baking soda in one of warm water. Rub until thoroughly dissolved. Stir this into a pint of buttermilk or thick, sour milk. Add it to the meal. Mix thoroughly. Bake in a quick oven in a shallow pan for about 45 minutes.

APPLE CORN PUDDING.

Pare, core, and cut into thin slices six tart apples. Stir them into one quart of milk, then add one quart table white meal, one-quarter teaspoonful salt, four tablespoonfuls chopped suit, one cup molasses. Mix well, turn into a baking dish, and bake slowly four hours. Serve hot with foamy sauce.

An historic tree fell in the face of a evelone at Hartford, Conn., the other day. It stood in front of the house once occupied by Lydia Huntley Sigourney, and under it on a hot day in June, 1846, President James K. Polk, then on his visit to New England, alighted from his carriage to pay his respects to Hartford's famed poetess. While he was engaged in conversation with his hostess. sneak thieves slipped around to the rear of the house, entered and stole all her iewlery and silver spoons. They were subsequently discovered and served the State four years in the penitentiary. Mrs. Sigourney visited them twice a week at times and always took them

### THE HOUSEWIFE'S **DEPARTMENT.**

We offer below a large assortment of useful articles for the special benefit of our later readers. In the preparation of this list we had in view particularly the wants of the women. In making up the assortment we have expended a great deal of time and pains in the examination of the largest stokes of goods in the New York market. We have thus been able to secure many things not to be found at all in our country stores, and in all cases we have aimed to save our patrons at least 40 per cent. upon retail prices for the same class of goods.

Everything here offered will be found to be of the very best quality and of he greatest value for the respective prices given. It will be noticed that we have given the price and pastage separate in the case of everything sent by mail. In those cases where postage is not named, articles will be sent by express to the nearest express office, except where it is stated "postpaid."

### LADIES' BLAZER SUIT.

Just the Thing for Traveling.



The postage on either of the above is 49 cents thich amount please send with your order. Or, we fill send suit by express, the charges to be paid by

WAISTS FOR BLAZER OR ETON SUITS.



IN ALL TEXTURES AND PRICES. 

THE ETON JACKET SUIT

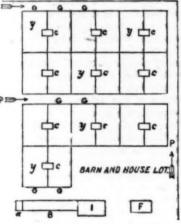




#### A POULTRY FARM.

#### A Description of the Fixings of a Firm of Practical Poultrymen.

EDITOR AMERICAN FARMER: Our farm comprises 10 acres, and lays in town just at the edge of the city limits, so that we are within a mile of postoffice and houses; Y, Y, Y, are yards, and G, G, G, passage ways, wide enough to drive through; A, is stove and cook house; B, is the brooder house; I, incubator house, and F, is the feed house for storing



The chicken houses (C) are 7 x 14 feet, with a partition through the center, and each half holds 10 hens and a cock, and each flock has a yard to itself. Each half house has a window on the south side and six nest boxes on the low or north side. Roof slopes but one way. Each house has a door on east end. The the same. floors are of coarse, dry sand. Each half house has a low roost with boards to catch the droppings, all of which can be taken out and cleaned. The dropping boards are cleaned every morning, and strict cleanliness observed on ground and in nests, so that we have never been troubled with lice. The windows on south side are at such a hight as to cause sun to shine in nest boxes in Winter and on the ground of sand under the boxes in Summer, so that it takes an extra cold day in Winter for our eggs to chill if the

sun is shining.

Each house has two yards—a yard for each flock, and each yard is 46 x 69 feet, and inclosed by a six-foot wire poultry fence, thus keeping each flock separate. eggs a week in the Spring and Summer, but less in Winter.

Our incubator house is built very solid, with eight inches of sawdust all around the walls and roof, thus making it frost proof and giving a very even temperature. It is 16 x 24 feet, and contains eight incubators, five of them holding 300 eggs each and three 200 eggs, making a capacity of 2,100 eggs,

or 700 every week. Our brooder house is two stories high and 12 x 100 feet on each floor, with a three-foot passage way running along the north side. Each floor is divided into 20 pens 5 x 9 feet, thus making 40 pens each, holding from 40 to 100 chicks, according to size, giving the house a capacity of about 3,000 chicks. Pens on the upper floor are for the vounger hatches, and have no outside runs as they do not need to be out when small. The pens on the lower floor have outside runs 5 x 10 feet each, and the large chicks can run out on days that will permit. They are driven through from pen to pen as they grow larger, and do not have to be handled. There is one window for each pen.

The brooders are of the hot-water-pipe system, and give both top and bottom heat, so the chicks do not crowd. They run the whole length of the building, and are easily cleaned out every morning from the passage way. I have, however, used a home-made incubator with equally as good results, which I will tell you of farther on.

A is a stove house on east end of brooder house. It contains the two Brahmall-Deane heaters for the brooders and a furnace for cooking feed. I will say that these hot-water heaters are very

economical in the consumption of fuel F is the feed house, and contains simply bins for the storage of grain and other feed; also a Webster and Hannum bone cutter and a Little Giant clover cutter. The latter is hardly ever used, as we store second-growth cabbage, which lasts us till late in the Winter for green stuff.

Our best hatch has been 91 per cent of fertile eggs, but I will state also that all hatches have run pearly up to that average. These incubators keep a very even temperature, running between 102 and 104 degrees, and the best hatches are secured at this temperature if you take the eggs out of machine to turnthem, but if you keep incubator closed paratus 102 degrees is about right.

We are right with the old hen on hatching, and we might also say on raising, though we only raise about half the chicks batched, but I think this is as well as the hens would do if you had 300 of them to look after, each hen

having 10 young ones,

A very small per cent. of chickens banks. I inclose you a rough sketch of houses and yards, so that you may see the other side, all under this per cent. has never had less than a 75 per cent. would be clear loss. Right here let me hatch of fertile eggs. She keeps the say, do not expect to raise too large a temperature between 102 and 1031 detheir convenience. C, C, C, are chicken | would be clear loss. Right here let me gates for entering same; P, P, P, are per cent. My experience is they are easier hatched than raised. So do not count them before they are hatched, and do not count them till they are sold and you have the money for them. In regard to prices, we sell altogether in the Chicago market, and sell alive. They bring about as follows, and prices are surer than the raising of the chicks: In March they must weigh one pound apiece, and bring \$5 per dozen; in April and May one and one-half pounds each, and sell as high as \$7; in June,

We do not use a home-made brooder, mine is very rough in appearance, for I rain. am no carpenter, but it gets there just

We keep a team of all-purpose horses for farming, hauling our coal and sand and gravel, and they do enough outside work besides to pay for their feed. They are indispensable.—CARMAN & GRIFFIN, Charleston, Ill.

### White-Crested Bearded White Polish

smaller than those of to-day. The white-erested bearded white Polish, though of ers here is quite low. uniform, white plumage throughout, "I will endeavor to give a description have the same erect and strutting car- of my home-made brooder. I took it 69 feet to fit the ground, and 40 x 80 favorites with the ladies. Their plumage front end has two narrow glasses. cubators going, giving us nearly 700 perfectly dry and clean, as their beauty and then nailed together. The sash at

INCUBATORS AND BROODERS.

# Experience of These Who Have Raised Chickens by Artificial Means.

The latter part of last month we sent a circular letter to several poultry raisers, asking them their experience in raising poultry by artificial means, the best hatch it secured, at what tempera-ture, how many chicks were successfully raised, and the average price secured for them. Below we give the answers

J. A. Criswell, Blue Island, Ill., says his best hatch was 80 per cent., with the temperature between 100 and 105 degrees. He managed to raise on an average of 70 per cent. of the hatch, which he sold at three months old at \$1.20 per pair, the weight of the chickens averaging three and one-half

Mrs. J. P. Williams, box 458, Pueblo, Colo., says the best hatch she ever had was 84 chicks out of 100 eggs. Thirteen raised to market age will pay expenses, of the eggs were not fertile, and three grees, not over the latter. Out of the 84 chicks hatched she raised 79, which were sold when three months of age at if you do not want to be disappointed, 60 cents each. She tried one homemade incubator and another manufac tured one, but has secured her best results with the Invincible. She bought one of 200-egg capacity in early February, and up to June 10 she had 764 chicks. She thinks there is less waste with a brooder in taking care of 150 chicks than with the old hen.

Mrs. J. H. Burton, Hillsdale, Ill., is of the opinion that a fertile egg will two pounds each, and sell at about \$4.50; hatch as quickly in an incubator as unin July, two and one-half pounds each, der a hen. The best temperature is beand sell at \$3. We do not sell later tween 100 and 105 degrees, care being than July, for we hatch in Winter and taken not to let the eggs chill when early Spring. Raise garden truck in turning. She has her incubator, of 300egg capacity, in a cellar, with window lights, and the temperature is easily conbut when I was 14 years old I made a trolled. Chicks hatched in an incubahot water incubator after the Poultry tor and raised in a brooder almost all Keeper's plans. It holds 100 eggs, and live. There are no lice on them and to this day will hatch with the old hens, no hen to trample them. The brooders often giving 90 per cent. or above of are tight, so no cats or other enemies can fertile eggs. They are cheap and easily get to them. The hens are healthy. made, but require a little more attention Sitting weakens them more than laying than the lamp incubator with self regu- all Summer, and there are so many eggs lator, and they are so bulky they move to sell with no sitting hens and no dragabout like a heavy stove. Of course, ging young young chicks in wet dew and

M. J. H., whose name and post-office address are not known, writes: " My best hatch was 72 per cent. I secured my hatch at 103 degrees. I never had success with home-made hatchers. I use a Boughten Brooder. While the chicks are right little I take them from that, as their natures call for it, to a home-made pool merchants seems willing buyers at 75 brooder, of which I have six. Out of the best hatch I could not tell how many The first importations of Polish came I raised, for I had as many hatched unfrom Holland to England, and were der hens and they were mixed up. As mostly black and white, not having for selling them, I sell none but the beards, and with topknots that were crowers, unless I get more than I want

riage which characterizes all the varieties from a farm pamphlet, given for making of the Polish class. The color makes an incubator. I tried the incubator; it The yards are large enough so that 11 them attractive, and in appearance are would not work; it was not made per-The yards are large enough so that 11 them attractive, and in appearance are would not work; it was not made per living on the hand-to-mouth plan, and have made no provision for the coming few months; never wear off the grass in Summer, ever placed on arbibition. They attract as any fowls feet. My brooders are 27 inches long, that when they realize their position the price never wear off the grass in Summer. ever placed on exhibition. They attract
The run was built the odd size of 46 x attention wherever shown, and are 10 glass in the sides and one end; the four will advance and force higher prices for wheat; that when the flour market shows for wheat; that when the flour market shows and always in the sides and one end; the four will be a would give about the same size. Thus is as pure and white as snow, which ne- door, four and a half inches wide, with we have room for 200 hens and 20 cocks, cessitates great care and attention to pre- grooved pieces on each side for it to slide and most of the time they keep our in- serve its beauty. They must be kept in. The sides are made the same as sash



depends upon the delicacy of their | the ends must be wide enough to allow who desire to keep fowls, and only have especially adapted. They will make fine pets under proper treatment, and will in a short time become the admiration of the entire household. They lay well under favorable conditions, but are non-sitters. The chicks require almost constant attention and care; the dryness of the coop being the greatest necessity for their welfare. If it is your purpose to keep pets, no fowl is better suited for that purpose than this breed, but the success of the breeder or fancier depends largely upon the attention he exerts to provide for their wants.

### Incubator Regulator Wanted.

EDITOR AMERICAN FARMER: Will some reader of your valuable publication either describe how to make a metal regulator for an incubator, through your columns, or send me the address of a dealer who sells them .- J. M. DAILEY. all the time and turn with a patent ap-Washington, D. C.

plumage and the cleanliness of their ap- the top sheet iron to turn up at the corpearance. Attention must be given to ners to allow the warmth to come up. the preservation of their beard and crest, The bottom sash must not be but two and they should be provided with a inches wide. The space that the glass covered water fountain. To those persons occupies on the inside is one inch thick and two inches wide. Nail the first a limited space for them, this breed is sheet iron on and turn it up at the corners, as I said before, slip a piece of sheet iron across the ends where it is turned up and nail these with small nails. Now for the bottom, next to the lamp or gas, whichever it may be. Put on another sheet iron as large as the brooder, or if one inch bigger it won't hurt. Be sure your iron has no holes in it for the bottom next to lamp, as the fumes will kill the chicks; put a board lid on and it is done. I have my brooders set on level ground, with a place dug out nearly as large as the brooder, and opposite the door of the brooders is a place dug and boxed up to put the lamp under the brooder in middle; the lamp is two inches from the bottom of brooder and

### What It Has Done for the Old Gent.

Have kept and sold Hires' Rootbeer several years. I have drunk it exclusively this summer. Am 78 years old and feel like a boy. It is ahead of sarsaparilla.

H. VAN WAGENEN, M. D., Darlington, Wis.

## THE MARKETS.

Justice, Bateman & Col's circular says: A few of the woolen mills which have orders for goods are running full time; many are running on short time, and a life number have shut down altogether. The sequence of idle machinery is a dull wool market. The present depression in manufacturing circles is more severe than any that has preceded it for a generation. There is no ranic, but the mills are being closed to escape a loss that cannot be avoided if the proposed program of tariff

are being closed to estrife a loss that cannot be avoided if the proposed program of tariff revision is carried out. The New York Post, which is very close to the Administration, in speaking of the subject says: 'It is not a mere possibility of tariff revision that confronts us; it is the certainty. If this means ruin, then ruin will come as surely as the sun will rise to-morrow.' Statements of this nature from sources apparently well informed lead to the conviction that tariff revision of some sort will be adopted. A restoration of confidence would undoubtedly result from an official announcement that no tariff reductions would be made. Money is abundant, but, owing to the prevailing slarm, it is withheld from circulation. Neither banks nor trust companies are making loans to any extent, and their funds are withheld from circulation to such a degree as to have deranged the usual processes of exchange between different localities. In manufacturing circles there is no difference of opinion as to the cause of the present trouble; nor is there any doubt as to what action is necessary to set the spindles. present trouble; nor is there any doubt as to what action is necessary to set the spindles again in motion. The business community do not fail to observe the strong contrast be-tween the condition of business to-day and tween the condition of business to-day and
that of one year ago, when this country was
the only prosperous Nation in the world.
Doubt as to the policy which will be submitted for the system of protection adds to
the universal distrust. If the Sherman Silver Law (which many believe is the paramount factor that is causing the decline in
wool) is repealed, it will then be seen that
the cause for the present depression lies depart the cause for the present depression lies deeper, for other staples, such as cotton, for instance, not menaced by tariff changes remainsteady, while the menace of free wool has caused Meor London value is only 30c scoured. If the Sherman law is responsible for the tumble in prices the removal of the cause should restore

them to the old figures. Nothing can prevent a fall in the American prices to the free wool level except the abandonment of the proposed changes in the duties upon wool and

posed changes in the duties upon wool and woolens, to which the Administration has been so publicly committed."

Clapp & Co.'s circular says, with regard to wheat: "Baltimore reported receiving more new wheat since July 1 than same time last season. The Spring wheat movement in the Northwest for the year ending July 1 was the largest on record, and nearly double what it was two years ago, when our largest crop was grown. Their visible supply has decreased but little thus far this season. Exports have exceeded those of any similar time on record, and have been about 24,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 busbels to date. A report says the world's visible has decreased about 1,000,000 dust have been about 24,000,000 busbels. September. 7,15 7,35 7,15 7,387 4; 9,100 1,100 1,100 1,100 1,100 1,100 1,100 1,100 1,100 1,100 1,100 1,100 1,100 1,100 1,100 1

pool merchants seem willing buyers at 75 cents per bushel, delivered to them. European crop reports, as well as our late private American advices, make crop conditions appear no worse, and bethaps a trifle better, than a month ago. Exports since July 1 have been about 50 peg cent. larger than same time last season. Primary receipts have been nearly 50 per cent. less. The price is about 50 per cent. less. The 25 per cent. less. Many estimate country reserves of old wheat are light, because farmers were in great need of funds to pay maturing and harvest bills. They also claim millers have been searching the country over for enough for daily grinding needs; that millers, jobbers, and retailers have all and each been leading indication and a pointer to buy wheat on with expectation of a large profit; that Great Britain bought more wheat and flour from America last year than ever before, and expect to see at least 150,000,000 or 175,000,000 bushels leave our shores during the year end-ing next July, and that it will be impossible for us to spare that much; that the growing crop will not exceed 400,000,000 bushels, and lastly, that it will be but a short time before the apparent excessive carrying charges will disappear. That Fall seeding will be the least in many years, as the ground is too dry

and price too low Our Chicago advices indicate that bankers there have no loans on wheat and provisions; that Board of Trade men own both without borrowing funds, and that the better moneyed more for December wheat. The Government report made condition of Spring wheat 67.0, against 74.1 July 1 and 87.3 a year ago, indicating a crop of about 100,000,000 bushels Spring wheat, ag bushels a year ago. wheat, against about 120,000,000

Wool.

Boston, Aug. 3.—The demand for wool continues quiet and sales are made in most care in small lots. There has been a pretty fair attendance of buyers, and they have been looking the market over preity thoroughly, and when bargains have been offered they have been ready purchasers. Many of the mills that are shut down or are talking of shutting down are in the market buying wools, and, where their credit is first-class, they are able to buy wool on very favorable terms. There is not the slightest change to report in prices.

The market for Ohio and Pennsylvania fine washed fleeces is very firm, but the demand is extremely quiet. The supply of XX and XX and above is scarce, and the lowest inside price that would be accepted would be 25 per pound, the socured cost being 52. A small sale of X and X and above was made at 23,224, the first sale that has been made for some time, A very choice but small lot sold at 23, which is an extreme price. There is no demand for No. 1 wools, the outside asking price being 25 per pound.

Michigan fleeces are quiet and steady. The Wool.

treme price. There is no demand for No. 1 wools, the outside asking price being 25 per pound.

Michigan fleeces are quiet and steady. The supply offering is not large, but is ample for all requirements. Holders are asking 21 for X lots, but no sales have been made over 20t, while some lots have sold at 20 per pound. On a scoured basis the average price is about 45 per pound. The market for No. 1 Michigan is nominal, the scoured brice fieing 40 per pound. Washed combings angeduit and neglected, with asking prices the same as last reported. The supply is not large. Fine delaines are quiet and steady. The top price for good Ohio delaine is is 26t, to cost clean 22 per pound. The staple is said to be far short of the average owing to the severe Winter. Unwashed combing wools are very quiet, and prices has been sold at prices ranging from 15a18, the average scoured price being about 43c per pound.

There has been a fair request for Territory wools. A sale of 300,000 pounds was made on a basis of 26c, clean, for fine incidum wool. This was a poor lot of Idaho wool, A good, fine medium Montana is worth 25c, clean, and choice fine wools are quoted 44: 42c, clean; medium wools are very quiet, the secured price rangeing from 30a5s. Very little Montana wool is to be found in this market for sale.

Texas wools are very quiet, and sales are made in small bots. The average scoured price for Spring wools is 40c. The competition with Territory wools is the cause of the small sales.

The sales of California wools have been very small. Choice Humboldt wools sale, scoured, at 22a3, and the same price is obtained for choice Southerns of 12 months' growth. Oregon wools are neglected. For the best No. 1 Eastern the outside scoured price is 40c per pound.

#### LABOMBARDE & DEPARIOS. Commission Dealers-Hay, Grain, and Produce.

Liberal Advances Made.

Review of the Fortnight.

than reported last week, and prices are on a very easy basis.

Ohio and Pennsylvania fleeces—No. 1 fleece. 25a30; X and X and above, 22a24; XX and XX and above, 23.

Michigan, Wisconsin, etc.—Michigan X, 20a20; Michigan No. 1, 24a25; New York, New Hampshire, and Vermont X, 20; New York and New Hampshire No. 1, 24.

Combing—Kentucky and Maine † blood, 2la22; Indiana and Missouri † blood, 19a22; Indiana and Missouri † blood, 19a22; Indiana and Missouri † blood, 19a22; No. 2 Ohio, 25a29; No. 2 Ohio, 25a27; No. 1 Michigan, 27a28; No. 2 Michigan, 25a23.

Delaine Wools—Ohio, 25a29; Michigan fine, 23a 24.

Territory Wools—Montana fine and fine medium, 10a18; Montana No. 2 medium, 15a17; Wyonting, Utah, Dakota, and Colorado fine and fine medium, 10a18; Wyoning, Utah, Dakota, and Colorado No. 2 medium, 15a17.

Southern Clothing Wools—Georgia, 19a21, nominal: Kentucky and Maine †-blood clothing, 20a21; Missouri and Indiana, 19a20; Kentucky and Maine †-blood clothing, 20a21; Missouri and Indiana, 19a20.

Montevideo wools, nominal, 27a28 fair to choice.
Cape wools, 25a28, as to quality, nominal.
Carpet Wools—Aleppo, 13ja14; Angora, 15;
Assyrian, 12ja18; Cordova, 16j; Valparaiso, nominal, 16; Donakol Autumas, 19a29; combings, 24a28; cardings, nominal, 20a22; greasy, 13ja14; Bokhara, 13a13j; Khorassan fieece, 22a
23; East India, nominal; Bagdad, white, 25a26 for choice, and 25a24 for ordinary; do, fawn, 22a
23; do, colored, 20a21 for choice, and 19a20 for ordinary; Chria carpet, 14a15; do, ball, 18; Karadi, 15a20; Mossoul, 20a22; Scotch, 17a18; camel's hair, 12ja13j.

Grain.

Grain.

CHICAGO, Aug. 11.—The best wheat market in mouths developed to-day. The cash price is up 3 a bushel. For the September option there was an advance of 2½, and the closing was steady, within ‡ of the top figures. The low crop estimates, light receipts, and better financial outlook were the main reasons.

There was a good deal of corn sold at the start on the showers reported through the Mississipul.

There was a good deal of corn sold at the start on the showers reported through the Mississipp Valley and westward. Opening trades were at tak, loss, and after selling down i more, rallied i, on good buying, changed some, ruled steady, and closed with a trifle gain. Trade in oats was liberal and a stronger feeling, prevailed, due chiefly to the advance in wheat, and also to the Government crop report reducing the condition over 2 points last month.

BANGE OF PRICES Open. High. Low.

Live Stock.

CHICAGO, Aug. 11.—Cattle—Enough cattle arrived to keep salesmen busy. The demand was only moderately strong and centered on handy, fat steers of good style and finish. It is hard work to get buyers interested in grassy cattle and salesmen found a poor outlet for such kinds. The best steers sold early in the day at firm prices and the movement was fairly active, but the general trade dragged along slowly and closed dull and weak. Quotations: Fancy native steers, 1,500a1,750 lbs... \$4.70a\$6.15
Choice to fancy steers, 1,300a1,500 lbs... 4.0a 4.75
Good to choice steers, 1,200a1,400 lbs... 3.00a 4.50
Poor to fair steers, 900a1,100 lbs... 3.00a 4.50
Common to good butchers' steers. 3.15a 3.90
Choice to extra cows and heifers... 2.60a 3.35

### DROUTH IN EUROPE.

#### The Agricultural Interests in Southern Europe on the Verge of Disaster.

The State Department has received a very interesting report from Consul General Frank H. Mason at Frankfort-on-the-Main. It deals with the effect of the drouth in Europe and discusses the probabilities of a cholera outbreak. Mr. Mason says that it is generally conceded that the prolonged and still unbroken drouth has brought the agricultural interests of cen-tral and southern Europe to the verge of disaster. The situation has been aggravated by an unusually warm and early Spring. The latter half of March and the whole of April were marked by a succession of warm, bright days which parched the already dry ground ture foliage and blossom, so that now the traveler in Germany meets everywhere the unaccustomed spectacle of green woods and

unaccustomed spectacle of green woods and blooming orchards alternating with meadows and pastures as gray and barren as in March and November.

Seeds which were planted early in April have either not sprouted at all or have sent up a puny growth that is now withered for lack of moisture. The oat fields are in most cases as barren and dusty as a desert. Eye, which started viconously with the warm days which started vigorously with the warm days of early April, has been checked, and has commenced to head out prematurely at a hight of from 12 to 20 inches, and the peasants having exhausted their scanty hay sup-ply of last year have begun for want of pasturage to cut their rye as food for cattle. Wheat, except in valleys where the nature of the soil specially favors the retention of moisthe soil specially ravors the retention of mois-ture, has practically ceased to grow. Warm and copious rains would yet do much to save it and most of the other Spring crops, but un-less all conditions are henceforth favorable the wheat harvest of Germany this Summer

will be one of the lightest of recent years. But nowhere yet has there occurred, in this region at least, sufficient rainfall to afford any relief. The early crop of hay upon which so much dependence was placed after the scanty product of last season is irretrievably lost. Irrigation has done something in the neighborgood of cities and large towns toward bringing Produce.

Liberal Advances Made. Reference Exchanged. Correspondence Solicited.

No. 11 to 19 Hollis St., Nashua, N. H.

No. 11 to 19 Hollis St., Nashua, N. H.

# AWATCH, A CHAIN, A PAPER, \$1.65.

The Best Premium Offer Ever Made to the American Public.

NO TOY, NO HUMBUG, NO CATCH.

Only an Honest Watch and a Great Newspaper for Every Farmer for Less Money than he Can Secure them Anywhere Else.



In order to put THE AMERICAN FARMER at the top of the list in number of subscribers, we have secured sole control of the output of an American watch factory, which we will dispose of within the next thirty days at less

than cost.

This statement does not seem reasonable upon the face of it, but our readers know that the extension of a subscription list to any newspaper involves an enormous expense in advertising, and for other purposes. A new subscriber to any newspaper costs more than the publisher receives, owing to the expense incurred in procuring him. It is only subscribers who continue their patronage very effect year who are profitable from a person of the expense incurred in procuring him. year after year who are profitable from a pe

cuniary standpoint.

We intend, at any cost, to put the subscription list of THE AMERICAN FARMER at over three hundred thousand and take our place at the head of the list.

We therefore make the above offer of an honest watch, a chain, and THE AMERICAN

honest watch, a chain, and THE AMERICAN FARMER for one year for the insignificant sum of only one dollar and sixty-five cents.

The offer includes the delivery of all, prepaid, to any address in the United States.

We first offered this great premium in our issue of Jan. 1 for \$1.60 for paper, watch, and chain, limiting the time to 30 days. The demand for them has come by thousands. We find that they cannot be produced so cheaply as we had expected. We are, therefore, ebliged to increase the price from \$1.60 to \$1.65.

#### DESCRIPTION OF THE WATCH:

This watch is a timepiece guaranteed to run with accuracy. It need only be wound once every twenty-four hours. No key has to be carried, but it winds and sets by a patent attachment shown in the cut of the werks. The face, therefore, need not be opened to set it.

To save space the cuts are slightly reduced in size, the face of the watch being one and seven-eighths of an inch thick. It is no heavier than an ordinary silver watch, and but a triffe thicker. It has a strong, quick beat and runs in any position, either at a standstill or in motion, and is not affected by heat or cold. It is open-faced, with a heavy, glass crystal. The case is polished and lacquered to resemble gold. This material is frequently advertised as oreide or fregitt. The chain is not shown in the cut. It sells at retail in the country from 15 to 25 cents.

A small charm also goes with the chain.

Remember that THE AMERICAN FARMER

Remember that THE AMERICAN FARMER comes twice a month at the regular price, when taken alone, is fifty cents a year. We send, postpaid, the watch, the chain, and the paper for an entire year for only one dollar and sixty-five cents.

Our arrangements for the watch compel us to put a time limit upon this offer. We can only furnish this premium combination to those who order within thirty days. We regret to be obliged to place any limit whatever, but the sum is so small that it will not inconvenience anyone, we trust to send in

inconvenience anyone, we trust, to send in his name and subscription price for the premium and paper at once.

In order to demonstrate our entire confi-

dence in our proposition, we guarantee the delivery of the watch in good running order. The watch and chain will be sent, postage prepaid, to anyone who will send in a club of



six yearly subscribers at 50 cents each, and only 10 cents additional money to pay cost of postage and wrapping. Address at

THE AMERICAN FARMER, Washington, D. C.

Common Sense About Sheep Sorrel. Prof. D. E. ( hal not, of the Virginia

Department of Agriculture, expresses some sound sense in regard to sheep sorrel. He says that the common antipothy to this weed is not based on fact. It does not impoverish the ground, but is sign | Boys' Complete Suit, Extra Pants, that the ground is already impoverished and needs the addition of mineral constitutents, probably lime. It simply flour ishes on poor soil or soil that is poor in certain elements, and when these are supplied other vegetation will drive it out. Its growth also indicates the need of potash and phosphoric acid in addition to lime. Its appearance in any quantity is nature's sign to the farmer that he should feed his soil. Sorrel is not poisonous, as many think, though it does contain oxalic acid; yet this is in such a minute quantity that a vast amount would have to be consumed before getting an appreciable dose. There are many other weeds which are much

taste of milk. Watering a Crop With an Engine. Fortunate in having his farm intersected by one of the arterial drains of

more unwholesome than sorrel and

should be more guarded against, nor is

it at all certain that sorrel affects the

the district, Mr. Young, of Swineshead Abbey Farm, in the neighborhood of Boston, England, determined to utilize the water thus provided, and arranged with Messrs. Merryweather & Son, Limited, to send down one of their most powerful fire engines. With this engine about 80 tons of water per hour have been pumped onto crops of mangold seed and potatoes, and land is now being drenched preparatory to cauli-flower planting. Allowing for stoppages necessary for moving the 200 yards of hose from land to land and other incidentals, from three to five acres of land are covered with 120 tons of water per acre per day. Hundreds of farmers have witnessed the operation, and from each and all the wish has been fervent that they had the water and engine too. To the oft-repeated remark that the thing must be costly, Mr. Young's reply is: "Costly it may be, but not one-tenth part so costly as the drouth."

### A Monster Tree.

There is a tree at Tule, State of Oaxaca, Mex., which rivals in the extent of ground covered by its branches some of the famous monster trees of the Orient. A traveler, who saw it recently, says that he found resting under its branches a detachment of troops numbering 529. Most of them belonged to the neighborhood, and their wives and children had come to the rendezvous to meet them, and there were under the tree besides a number of vendors of all sorts of eatables and several horses. All these had plenty of room and they were all within the wall which surrounds the tree, while its branches extend some 20 feet beyond the wall on every side, affording shade for quite as many more.

BOYS' SPECIAL SAILOR SUITS.

Here's the Biggest Bargain Ever Offered in The American Market.

Cord, and Whistle for \$1.59.



We have been searching for a long time to give our subscribers an opportunity to secure boys' clothing made by the best manufacturers in the country at prices far below those that the manufacturers sell them for to the retail establishments. We have arranged to dispose of 10,000 of these boys' complete blue or gray flannel sailor outilts, consisting of blouse, anchor on collar, two pairs of pants, cord, and whistle (ages 4 and 12 years), all, postpaid, for.. \$1.59

These goods are made of Navy blue or gray wool flannel, well finished, and can be had in sizes from 4 to 12 years of age. Anyone desiring to buy a first-class article for little money should avail themselves of this offer.

THE AMERICAN FARMER,

WASHINGTON, D. C.

### RAZOR AND STROP COMBINATION.

This is a combination of good things that readers of THE AMERICAN FARMER will apprereaurs of the American Farmer will appreciate. Everybody knows the value and market price of a Wade & Butcher razor. It would be superfluous to describe it. It has always held first place, and it is because of this that The American Farmer has made arrangements for the following offer to its subscribers:



A Wade & Butcher razor, hollow-ground, with a hardsome fancy-edged blade, finely finished, and set ready for use; superior to all others.

A best strop, made of solid leather on a steel frame, with a box of American strop paste neatly placed in one end, and a lather brush of very fine bristles, firmly wound with best twine.

These three articles will be sent together to any subscriber by registered mail, delivered free, for \$2. These articles only sold together. For \$1 additional we will send with the above one hair brush made of imported Russian bristles, with a finely-finished rosewood back, and a first quality horn comb.

THE AMERICAN FARMER, Washington, D. C.

### OUR POCKET TOOL CHEST.

This wonderful combination of cutting, sawing, and piercing tools is about the size, when closed up, of a buckborn-handle jack-knife. It contains the following implements, namely, as saw, screw-driver, lancet, large knife-blade, smaller knife-blade, wood-scraper, gimier, corkscrew, reamer, bodkin, tweezers, and hook for cleaning horses hoofs. Mailed, postpaid, te any address for \$1.50.

# THE FENCE CORNER

He Could Wait.

Ragged Robert—Please, mum, if you could let me have an old suit of your

Mrs. Suburb—He has only one old suit, and I was just thinking about mending that.

Ragged Robert-I'm in no hurry, I kin wait till it's mended .mum.

The Exact Facts.



Lawyer-You think, then, that your assailant attacked you with malice pre-

Client-I dunno, sah; he might 'en had one o' dem kind o' mallets, but de principal thing he used wor a razzer, sah!—Puck.

### Rustic Endeavor.

"What are you trying to raise here?" asked the traveler. And the farmer looked up from his work just long enough to reply:
"A mortgage."— Washington Star.

### A Work of Time.

Mr. McSwat-Have you packed your trunk yet, Lobelia?

Mis. McSwat-Not yet. Mr. McSwat (looking at his watch)-Then you haven't any time to lose. The train leaves in exactly 36 hours.— Chicago Tribune.

An Out-Late View.



Brown-That's my new house, sure, but (hic) I didn't notice it was so awfully crooked (hic). It's not safe. - Judge.

#### Why She Wanted the Horse to Win. "I do hope Whip's new horse will

win the race next week." "Have you risked any money on

Ethel-No, but I've had a lovely new white suit made, and he said it would be a cold day when his horse got left.-Inter Ocean.

Needed It.



Polite Tramp-Madam, may I in quire what variety of fowl this is? Lady of the House-That is Ply-

Polite Tramp-Er-I thought so. Have you a stone-crusher on the premises ?-Philadelphia Times.

Upson-You were a witness to-day, I hear. Uncle Dan'l: how did you stand the cross-examination?

Uncle Dan'l-Oh, pretty fair; pretty fair; t'was rather cross at times, but ma hain't had me in trainin' fer nigh onter 60 years for nothin'!-Judge.

## A Pleasant Prospect.

"They say," said Spriggins, "that it takes three generations to make a genleman.'

"That," replied Wiggins, "opens up a pleasant prospect for your grandson. -Life.



"Lod! I doan see no pullet." Philadelphia Times.

Freddie-Ma, didn't the missionary may that the savages didn't wear any

Mother-Yes, my boy. "Then why did pa put a button in the missionary box?"—Life. THE BUTTER TEST.

The Competition Among the Guernseys, Durhams, and Jerseys.

World's Fair Grounds,
Aug. 12, 1893.
On the south end of the grounds are
the three cattle barns built for the test
cattle. Twenty-five Guernseys, Jerseys, cattle. Twenty-five Guernseys, Jerseys, and Durhams were entered and have best, in order to put our dairymen in the right light before foreign countries, to been closely watched and carefully tended for many weeks. We all know how the cheese test came out, and in a few more days we shall hear from the best of intentions but with few more days we shall hear from the butter test, although it is practically settled, and the Jersey men smile complacently and say, "What did we tell novices. As a result, the building at

sheds, where you dare not step without a special permit and all that, that you are in very famous company. In the Guernsey stable we see No. 15, owned by N. H. Fairbanks, a little creature that has produced two pounds of butter daily since May 1. There stands No. 25, owned by John M. Eddy, of Saratoga Springs; she made the best individual cheese test. Nos. 3, 5, 11, and 24 are all owned by Shaw, of Massachusetts, also Francis, lying very quietly at the farther end, so tame that the boys sometimes ride him to water. Although ex-Vice-President Morton has lost most of his herd in that big fire, he has some beauties here. Nos. 7, 12, and 23 all belong to him. He also owned Rosa Bella, who died here a few weeks ago. Crossing over to the Jersey barn we immediately ask to be shown Lily Flag, owned by Gen. Moore, of Alabama. This cow, although she is not in the test, has a butter record of 1,047 pounds in one year. She is a typical Jersey, perhaps a little larger than the average, and is possessed of an enormous appetite. As a rule, the great producers are great consumers, but even in this small herd we find an exception

or two. All of the Jersey men I have heard express an opinion on the matter, say that individual temperament has much to do with that question. No. 7, standing directly across the barn, is a very small eater and a great producer. I was fortunate enough to be present at the noon milking of the milk she gives. One member of the Wellington cafe upstairs. committee is present at each feeding and milking. By-the-by, the Jerseys have all of their food steamed and cooled for them. Mr. Fuller says he considers that it is then partly digested, and in that way just so much animal energy is saved.

Passing on into the Shorthorn division

we are pleased to note the gradations of types of this breed. It is a manufactured breed, and two near together show us what the breed was a few years ago. They had longer horns and legs, more loosely jointed, and with coarse coats. Farther down the line stood samples of the ideal type of to-day—a little shorter of limb, with sleek coats, round and more beef to be seen. I was with a Shorthorn breeder and he expressed to me as his opinion that for the sake of style, the breeders of this stock had made a great mistake in trying to get rid of the light roan and spotted cattle, and to displace them with the dark red. In his opinion, the latter have not the "staying" ability of the former. He was also frank enough to add that one of the great faults of the breed was its inability to hold out in the pail. Nora, owned at Osage, Iowa, is probably the best in this barn, and is fifth best in the Columbian test. No. 21 gives the most milk of any; is from Kansas.

Too much stress cannot be laid upon the importance of this test. Its benefits will be great to dairymen all over the world. Throughout there seems to be a decided desire for justice to all, and a good-natured rivalry pervades. It is an object lesson to everyone to see what business methods may accomplish in a matter of this kind. The cows are studied individually and treated accordingly. Everything is done for their comfort and bealth, and if nothing else is proven it will be settled beyond a doubt that this care and thought pays. Screens are put in at all doors and windows, they are kept well bedded and perfectly clean; if the weather changes suddenly, their food is changed. If they are changed from hay to grass, medicine is ad-

ministered in common sense methods. On the whole, much in this test speaks of the advance in this work and of the sterling qualities of the men who have had it intrusted to their charge.

Following are the totals of the three herds for the first half of the 90-day butter test for milk, fat, butter, and

olids othe	r than	fats:		
	Total milk.	Total lbs. fat.	Total credited butter.	Total solids not fat.
erseys herthorns	37,709.1 32,904.1 34,872.6	1,809.17 1,487.35 1,261.90	2,178.48 1,796.43 1,504.53	3,483.31 3,047.49 3,156.11

The Canadian Mite attracts a great amount of attention in a conspicuous place in the Agricultural Building. Winding steps have been built up to it so that the inquisitive may mount and

#### Make it Educational.

When it was decided to hold the Fair at Chicago, the Illinois State Dairy As-sociation took the initiative and asked all other States to send delegates to Chicago to settle upon some plan of the exhibit. It was decided that it was best for this country to make it educational in its methods, and it was also thought best is a dismal failure. It is meager in appearance and in no way adapted to the work. Anyone knowing a thing about butter would never plan a display case where the boiling heat of a Midsummer sun must pour in upon it. We all know, also, how the plumbing has ruined the prospects of the State displays. Wisconsin came down with a magnificent showing, but the tubes were at the bottom instead of the top of the cases, and the butter silently melted away. The vigorous man from that State ordered up drays, and it was sent to South Water street and sold, and the cases are like Mother Hubbard's cupboard. So of Minnesota, so of Illinois; perhaps not all in exactly the same way, but all very disappointing.
Only Nebraska and New York have

been able to, in any degree, carry out the idea of instruction in their exhibits. The former shows the creamery process of buttermaking; the latter has charts showing chemical composition.

Unless the tubes can be made to work. the case exhibits will amount to nothing. The only thing now left to be done is to change the buttermaking hour so that the visitors can see the improved machinery worked under favorable circum-

Those in charge of the State exhibits are trying to bring this about, so that the undertaking may in a measure, retrieve its reputation, so that the different State exhibitors will be glad to see a friend instead of being moved to hide at the sight of an inquiring visitor. As the matter now stands, there is nothing Jerseys, and saw then how carefully to see during visiting hours but empty each cow is credited with the amount of or emptying cases downstairs and a

#### Skimmings.

Artificial ivory is now manufactured out of condensed skim milk.

The extra food and attention given a dairy cow means more butter and cheese. A sudden change from one food to another will sometimes make a shrink

age in the milk. In feeding roots to cows, cut them fine enough, so that they will have no

difficulty in eating them. The cow Pieterjie 2d, owned by D Whipple of Cuba, N. Y., has a milk record of 30,3181 pounds in a single

From all quarters comes the good work seems prosperous.

some of the other choice varieties.

Ignorance is such an expensive luxury in dairying, the same as in all other business. When will we learn that it is just as cheap and no more work to make butter that will sell for 20 cents a pound than it is to make eight-cent butter. It has been demonstrated by experimenters that by using the Babcock test and sending the money-loosing cows to the block and keeping the progeny of the best members of your herd you can double the annual amount of produce. It has also been demonstrated that a separator takes practically all instead of half of the fats from the milk. Suppose we take a community that receives each year for its butter \$11,000 and makes a living. It uses the test, and in three years doubles the yield from the same number of cattle again with an income of \$22,-000 it adopts the separator and gets as much again fat from the same number of cattle. Is not \$33,000 dollars too much to pay for ignorance?

### Long-Distance Horse Race.

The Bosnian Provincial Government recently instituted a long-distance horse race. The course lay between Bishacs and Serajevo, and was 180 miles long. The roads were rough and mountainous. All 47 competitors rode native horses according to the first condition of the race. Nineteen of the riders were Austrian officers. A Mahometan landowner won the first prize of 12,000 given by Emperor Francis
He covered the course in 30:crowns, Joseph. 26:00. Three horses died on the road.

Popula- Number Area in No. of Popula- Popula- cows per tion per tion to

	tion,	or cows.	miles.	square mile.	square mile.	each cow.
Nebraska State	1,058,910	530,338	76,185	6.9	13.8	1.9
New England States	5,082,029	858,582	62,006	12.2	81.9	5.9
New York State	5,997,853	1,552.217	47,620	32.6	125.9	8.8 7.8
Ohio State	5,672,316	788,408	40,760	19.2	189.1	7.3
Wisconsin State	1,686,880	701,774	54,450	12.9	80.9	2.4
Iowa State	1,911,896	1,304,184	55,475	23.5	34.4	1.4
Illinois State	3,826,351	1,104,861	56,000	19.7	68.3	3.4
Kanasa State	1,427,096	773,480	82,000	9.4	16.0	1.8
United States of America	62,622,250	16,019,591	3,001,001	5.3	20.8	3.8
United Kingdom of Great Britain	35,246,563	8,400,000	90,821	37.3	388.0	10.4
France	87,672,048	4,800,000	204,071	23.5	184.0	7.8
Germany	45,288,829	6,800,000	211,459	32.1	214.1	6.6
Russia	73,643,627	7,900,000	2,132,136	8.7	84.0	9.3
Austria	22,130,705	4,600,000	115,925	88.8	190.9	4.8
Ttale	27.482.174	1,600,000	114,380	13.9	240.2	17.1
Houmania	5.376.000	1,200,000	46,700	25.6	115.0	4.4
Spain	25,268,506	1,000,000	192,950	5.1	130.9	25.2
Sweden	4,447,700	800,000	170,511	4.6	26.0	5.5
Norway	1,790,000	400,000	123,290	8.2	18.7	4.4
Denmark	1,969,454	900,000	87,168	10.8	22.5	2.1
Holland	4,100,000	900,000	12,886	70.9	828.1	4.5
Belgium	5,408,006	600,000	11,847	8.93	476.0	9.0
Switzerland	2,759,854	400,000	15,995	25.0	172.5	6.8
Por ugal	7,631,165	200,000	84,511	5.7	221.1	88.1
Canada	4,324,818	1,200,000	3,204,381	0.8	1.8	3.6
Australia	2,778,501	600,000	3,084,660	0.1	0.8	4.6

# THE ORCHARD.

Delaware and Maryland expect a good yield of peacher this season. The crop is placed at \$500,000 baskets.

The young trees set out this Spring

are not the only ones which require at-tentioh. The old ones should be looked

The locality may have a great deal to do in successful fruit growing, but in the majority of failures it is not due to this but to the grower himself.

A good plan of excluding the borer or grub from the peach tree is to bank the earth around the tree base a foot or more high. It is said to be quite effective. It seems as though the prune growers

on the Pacific Coast are having quite a time in finding a market. The crop this year in France is excellent, which has some effect on the growers. Budded apple trees will live as long as root grafted ones, if the stocks upon which they are worked are as hardy as

the variety of bud used, and so nearly

Mr. Hale, the peach specialist, says that he would prosecute anyone who spread stable manure among his trees free. They don't want nitrogen. It forces a late growth of wood that cannot resist severe Winters.

Experiments conducted under the auspices of the Delaware Experiment Station, with a view of discovering a remedy for peach 10t, have made plain that a principal source of infection exists in the decayed fruit that is left on the trees after harvest.

A New York quince grower, says an exchange, who has been much troubled by borers among his bushes, claims to have stopped them by washing the trees with two gallons of water in which was one gallon of soft soap, and when the suds was boiling he added one gill of carbolic acid. This he applied with a rag in May, and renewed whenever washed off by rains.

The Secretary of Agriculture is in receipt of a communication from the Society of Fruit Culture, of Russia, announcing an International Exhibition of Fruit Culture, to be held under the auspices of the society at St. Petersburg in the Autumn of 1894. Its object is to be to show "the present condition in Russia and other countries of the cultivation of fruits and vegetables, of viniculture, the cultivation of medicinal plants, horticulture, and of the manufacture of their products."

#### ORCHARD CULTURE.

The Planting, Cultivating, and Pruning of Fruit Trees in the Far West.

Mr. John T. Blackburn, the President of the Washington State Board of Horticulture, appeared before the recent meeting of fruit growers at Spokane and read a paper on the cultivation and care of orchards. He informed his audience news that dairy interests are being well husbanded, and that in every way the prairies of Illinois, and part of that time grew some corn. "My theory was, when work seems prosperous.

A brand of Canadian cheese which is being exhibited in Chicago is gaining in before it was planted, as I believed that recombined the consistency of the consist popularity. It is of the consistency of was the very best time; or in other words out any lateral shoots this year, but sim butter, and is packed in earthen jars. to thoroughly prepare the ground before ply to strengthen and develop the buds drinking (which often occurs), they may Its advocates claim for it great keeping planting. Now, if this theory and pracqualities and purity and richness. It tiee is right and good for corn, why retails at 60 cents a pound, but with no should it not be good for fruit trees? waste. It is thought to be no dearer than The selection of a proper site for an orchard may not be applicable to all, for the simple reason that some unfortunate persons have purchased small tracts of and and none of it suited for an orchard. Of course, such tracts are exceptions to the rule. There are other tracts that could be made suitable for orchard purposes by the proper system of under-draining. I have in mind now several orchards that for lack of this very important agent are almost worthless.

"I visited an orchard last month, and in conversation with its owner, who said he did not see what could be wrong about his orchard, the soil being good, deep, and rich, had received a liberal mount of cultivation, but the leaves had not the color they should have; they did not make the growth they should in such soil, and even the fruit was far below the standard and lacked in flavor. The simple reason for all this trouble was the ground needed underdraining. It had a natural drainage for its surface water, but where the roots of the trees were the soil was soured by stagnant water, and although the trees appeared to be doing the very best they could under the circumstances, it was impossible for them to do what their owner expected. I remarked to the gentleman that if he would go to the expense of thoroughly underdraining his orchard, there was no reason that I could see why all these difficulties should not and would be overcome. We should avoid a cold, wet soil for an orchard, and never plant on a thin soil. What I mean by a thin soil is when the hard-pan or cement is too near the top. After we have selected a proper site and before we begin planting, care should be taken that the ground be put in good condition, remembering that it is not only much easier to plow and work the ground before the trees are planted, but they will soon make up for the delay which may have occurred on account of thoroughly working the ground before planting, if even one season is missed by the operation. When it is

possible, Summer fallow before planting. "My experience and observation in western Washington go to prove that it makes very little difference whether we plant in the Spring or Fall. For years strongly favored early Fall planting, but now, if I had an orchard to plant and my ground was ready, I should plant, whether it were Fall or Spring, and should rest assured that the trees would do well. After we have thus planted an orchard we will have the

satisfaction of knowing that we have done our part, and that we may reasonably expect the trees to do well, provided we follow with good cultivation.

"It is not only necessary to have the ground in proper condition before the trees are planted, but it is just as essential that it be kept so for the general welfare of the orchard. My practice has been (and the result very satisfactory) to plant between the fruit trees and reasonable distance from them for four or five years such crops as potatoes, strawberries, etc. These crops need cultiva-tion, which is beneficial to trees. This is peculiar to western Washington, where the cost of clearing land is quite an item. I do not wish to be understood as saving that fruit trees are better by having these crops planted between the rows, but what I mean to convey is that fruit trees will do well with such treatment, and that the owner can realize an income from the small fruit before the large comes into bearing, which means much to the man of limited means

"If a man is financially able to clear his orchard side and also has sufficient ground for his small fruits, I say by all allied in kind as to form a perfect means do so, and if possible never let even a weed go to seed in either. As stated, it is not only necessary to put the ground in good condition before planting, but equally necessary to keep it so. My plan is not to cultivate deep, but to keep the surface loose by the frequent use of a cultivator. By so doing you will retain the moisture during the dry season. I do not stir the ground after August, as late cultivation tends to keep the trees growing too late in the Fall. which is very detrimental to them when Winter comes and finds them full of sap, and even making new wood. It is true we do not have hard frosts in western Washington. It is also true that it way, and possibly the second, if it may does not require a hard frost to injure a appear necessary, but after that there does not require a hard frost to injure a tree that is full of sap and growing.

"During the past nine years that I have lived on Puget Sound there has not been one frost that would injure a fruit bud if the wood was ripe, but we have had frosts that would, should it have found the trees in the condition before stated; so do not cultivate late, but let the trees have an opportunity to mature their buds, ripen and harden their wood before Winter. There are many modes, theories, and ways of preparing the land for an orchard, for planting the same, and for its cultivation, but there are many more theories for pruning, and I predict that a large | contact, as they can stir about and benemajority present will have a system of fit by the exercise. Such accommodatheir own.

"A good pocket knife and a good farmers, and they must content themthumb nail are all the instruments I use in pruning; provided, however, that I take the tree when planted. I will say nothing about the hight a fruit tree the neck, it answers wonderfully well in should be headed, as different varieties, practice, and is altogether so convenient different localities, and different circum- that anyone beginning to follow it out stances need different hights, and this is | will be very reluctant to leave it off, and of little consequence. We will take an in fact, is not at all likely even to do so. apple tree two years old. I head at A leather strap with buckle is the most from two to three feet, rubbing off all convenient fastening, a swivel being atbuds except four or five, and if these tached to the cord connecting it with the buds commence and continue to grow post to prevent the possibility of any acall about equal (which is seldom the case) until they have grown from 16 sucking, a habit which calves cannot be to 20 inches, I then nip off the point kept from when loose, and which is often with thumb nail, and if the tree is extra the cause of serious loss. In this way, on the main shoots and assist in de- take their own time without any danger veloping the trunk or stem; but should of being robbed by the others. For the shoots not grow evenly I stop the this reason it will be found that the strong, giving the weaker a chance to catch up, and should they throw out than when a number are fed out of one laterals, I stop them at six inches. I trough, the strong in the latter case inwill state here that many make a mis- variably pushing back the weak. The take with their young trees by letting them make too much top before the want of exercise, as might very naturally trunk or stem is stout enough to carry it properly, and unless stakes are resorted to, they frequently have their and, if properly fed, are always in ex-

trees lopped over by winds. "I have never had any trouble growing the top when the tree had good roots and a good trunk. To avoid the danger of being broken by heavy snows, I cut them back early in the Winter or late at some seasons, the poor things dying Fall to five or six buds. If the tree in frightful agony and generally just at has been properly cared for, we now the age when they are all reared. Twice have the foundation upon which to a day is quite often enough to feed a build a good tree, and as a solid foundation is necessary upon which to con-struct a good building, it is equally necssary for a fruit tree. After this I sually thumb prune the shoots earlier than the first year, but am careful not to have too many laterals, and by this means get the tops too thick and bushy. And I now consider that judgment and the right use of common sense are only necessary to have good, symmetrical trees."

### Normal Standard of Wheat.

The Secretary of Agriculture has States that the normal standard of the wheat crop during the past 10 years has varied from 13.60 to 15.69 The average has been about 14.5 bushels to the acre. By careful experiment kerosene emulsion has been found to be the most effective insecticide.

"Timothy" grass is so-called because first extensively cultivated by Timothy Hanson, a Maryland farmer.

000000000000 Worth a Guinea a Box. A trifling dose from a 25-cent box of Beecham's Pills

will frequently prove as effective as a docotor's prescription.

# GEORGE E. LEMON.

HOW TO RAISE CALVES.

Treatment of the Little Fellows Dur-

ing their First Days.

calf intended to be reared should be allow-

ed to partake of the biestings, nature's medicine, without which the little creat-

ure so recently ushered into the world

cannot possibly survive, or perchance if

it may do so, it is only to drag out a mis-

erable existence for a few weeks. Al-

though comparatively easy to get calves

to drink when gone about in a proper

manner, it is exactly the opposite when

attempted by a hasty-tempered or igno-

rant person, who endeavors to do by force what can only be accomplished by

gentleness and patience. The instinct of

the calf teaches it to raise its head and

strike against the vessel which contains

the milk, while the ignorant attendant

keeps pushing the head down. Others,

to save themselves trouble, put their

finger into its mouth, keeping it there

until the habit has been formed, and

the calf, by and by, will not touch the

milk until the hand is introduced. In

teaching the calf to drink there is no

better plan than to open the mouth with

one hand, which is easily done by slip-

ping the arm under its neck, keeping

the mouth raised at the same time.

With the other hand the milk can be

lifted out of the pail and poured into its

mouth, when it is compelled to swallow

it. The first feed may be given in this

need be no further trouble taken: the

calf, having acquired the habit of swal-lowing, will drink freely without the

slightest assistance. This mode of teaching a calf to drink saves a great deal of

after-trouble and annoyance; nothing

mbre being required than to place the

milk before it. Preventions of contact

are a number of calves being reared to-

gether of mixed genders; they are less

liable to accident and enjoy better health.

Separation by cribs so arranged as that

the occupants can see each other is un-

doubtedly the best mode of preventing

tion is, however, attainable by ordinary

However unnatural it may be at first

sight to tie calves of a fortnight old by

young animals do not seem to suffer for

cellent condition. When sucking is

thoroughly prevented, there is no danger

of loss from hairs introduced into the

stomach, and getting impacted into a

hard ball, a fruitful source of mortality

calf, giving a third meal involving a

certain amount of extra trouble, besides

interfering with the milk which has been

placed in the dairy, always an unpleasant

thing for either mistress or maid who

takes charge of it. The stomach being

cleared by the action of the biestings

and digestion fairly commenced, there is

little difficulty in keeping the young

animal in healthy, thriving condition.

To sharpen the appetite half a gallon of milk will be sufficient for each meal

during the first four or five days, grad-

ually increasing the quantity until it

reaches two gallons a day, more than

that being scarcely required for any calf

intended to be held over for store pur-

poses. About the 10th day a portion of

good, skim milk may be substituted,

slightly increasing it each day until the

16th or so, when the new milk may be

altogether withheld. In the early months

of Spring and Summer calves thrive

well on good, skim milk, enough to

cause coagulation; they do equally well on the thick milk, fattening on it if

supplied in abundance. For the quan-

tity of milk to be given a calf at each

meal there should be no special rule,

each animal after being fairly started

getting as much as it drinks without re-

pletion, its fully rounded sides being an

excellent and unfailing indication of enough having been drank for that time.

An objection may be made by many

that the skim milk is here proposed to

be too early substituted for the warm

milk as it comes from the cow, but I say

it advisely that it will not pay the ordi-

nary tenant farmer who breeds cross-

bred cattle to continue to give it more

than a fortnight or three weeks.-A

selves with tying them by the neck.

EDITOR AMERICAN FARMER: Every

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#### Curing Tobacco.

In technical bulletin No. 5 the North Carolina Station gives the results of its trials, and chemical analysis of the product, on the different methods of curing tobacco. The discussion applies only where artificial heat is used, and the question to be determined is the relative advantage of gathering the leaves as they mature, and stringing them on wire for curing, or cutting and curing the whole stalk as is the univer-

sal practice in the North. Some of the conclusions reached are as follows: The larger amount of tobacco obtained by the leaf-curing process resulted both from saving all the lower leaves when at their best, and an increased growth of the upper part of the plant, caused by priming the lower

The superior quality and appearance of the bulk of tobacco cured by the leafprocess, as indicated by the sale, was mainly due to the fact that the leaves were harvested as they became matured. By the stalk process many of the lower leaves were over-ripe, while the tips were still green. In addition, it is believed that the leaves received less damage from handling by the leaf-curing process than when handled on the stalk.

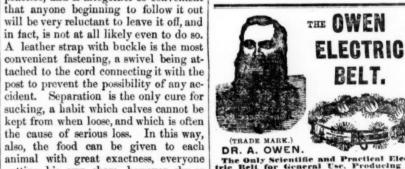
The chemical composition of tobacco cured by similar methods is not materially affected by separating the leaf from the stalk before curing, provided the condition of the tobacco when put in the barn.

The time required for curing leaves from different parts of the plant varies according to their ripeness. Some of these leaves require an entirely different range of temperature from others to produce the required color, etc. For these reasons the leaf-curing process is more desirable, as the barn is filled each time with tobacco requiring like treatment to is of the utmost importance where there produce the best results in color, quality and general appearance.

#### Sweet Clover to Keep off Flies.

"Pick a bunch of sweet clover," says the Boston Traveler, "and hang it up to dry in your living room. It will drive away more flies than any one square yard of paper."

In sawing a log at Beaver Dam Mills. in Burke County, Georgia, a snake was found in a knothole, which when the tree was standing was 52 feet from the ground.



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